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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

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=> d l113 bib abs hitind hitstr retable tot
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L113 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:934074 HCAPLUS Full-text
DN 141:403330
TI Polymeric electroluminescent device using an emitting layer of nanocomposites
IN Kim, Young Chul; Kim, Jai Kyeong; Yu, Jae-woong; Park, O. Ok; Park, Jong Hyeok; Lim, Yong Taik
PA Korea Institute of Science and Technology, S. Korea
SO U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 20040217696	A1	20041104	US 2003-699119	20031031	<--
	US 6995505	B2	20060207			
	KR 2004093531	A	20041106	KR 2003-27432	20030430	<--
	JP 2004335438	A	20041125	JP 2003-327156	20030919	<--

PRAI KR 2003-27432 A 20030430 <--

AB A polymeric electroluminescent device suppresses photo-oxidation and enhances luminous stability and efficiency by using a nanocomposite of a luminescent polymer and metal nanoparticles as its emitting layer.

IC ICM H05B0033-14
ICS H05B0033-00

INCL 313504000; X31-350.6

CC 73-12 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 36, 76

ST polymeric electroluminescent device emitting layer nanocomposite

IT Electroluminescent devices
Luminescent substances
Nanocomposites
Nanoparticles
Stability
(polymeric electroluminescent device using emitting layer of nanocomposites)

IT Metals, properties
Polymers, properties
Transition metals, properties
RL: CPS (Chemical process); DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
(polymeric electroluminescent device using emitting layer of nanocomposites)

IT 7439-89-6, Iron, properties 7440-02-0, Nickel, properties 7440-06-4, Platinum, properties 7440-22-4, Silver, properties 7440-48-4, Cobalt, properties 7440-56-4, Germanium, properties 7440-57-5, Gold, properties 96638-49-2, Poly(phenylenevinylene) 123863-98-9, Poly(9,9-dihexylfluorene) 123864-00-6, Poly(9,9-dioctylfluorene)
RL: CPS (Chemical process); DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
(polymeric electroluminescent device using emitting layer of nanocomposites)

IT 7440-06-4, Platinum, properties 123864-00-6, Poly(9,9-dioctylfluorene)
RL: CPS (Chemical process); DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
(polymeric electroluminescent device using emitting layer of nanocomposites)

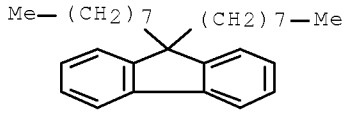
RN 7440-06-4 HCAPLUS
CN Platinum (CA INDEX NAME)

Pt

RN 123864-00-6 HCAPLUS
CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 123863-99-0
CMF C29 H42



RETABLE

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Anon	2001			KR 200195437	
Duggal	2001			US 20010033135 A1	HCAPLUS
Duggal	2003			US 6515314 B1	HCAPLUS
Korgel	2003			US 20030003300 A1	HCAPLUS
McNulty	2003			US 20030111955 A1	HCAPLUS
Shi	1997			US 5677545 A	HCAPLUS

L113 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:78554 HCAPLUS Full-text
DN 140:154111
TI Electroluminescent device and methods for its production and use
IN Kinlen, Patrick J.
PA Crosslink Polymer Research, USA
SO U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 207,576.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 20040018382	A1	20040129	US 2003-352476	20030128	<--
	US 7361413	B2	20080422			
	US 20040018379	A1	20040129	US 2002-207576	20020729	<--
	US 7029763	B2	20060418			
	CA 2493153	A1	20040205	CA 2003-2493153	20030718	<--
	WO 2004011250	A1	20040205	WO 2003-US22473	20030718	<--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
	AU 2003256608	A1	20040216	AU 2003-256608	20030718	<--
	EP 1542867	A1	20050622	EP 2003-771654	20030718	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
	JP 2005535077	T	20051117	JP 2004-524640	20030718	<--
PRAI	US 2002-207576	A2	20020729	<--		
	US 2003-352476	A	20030128	<--		
	WO 2003-US22473	W	20030718			

AB A luminescent device is described comprises an electroluminescent phosphor in operative contact with a light-emitting material wherein excitation of the

electroluminescent phosphor by an a.c. elec. field causes the emission of light by the light-emitting material, and wherein the electrodes may comprise an intrinsically conductive polymer. Methods of fabricating the device and using it in an electroluminescent display are also described.

IC ICM H05B0033-14
ICS H05B0033-26

INCL 428690000; 428917000; 313503000; 313509000; 427066000

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 74, 76

ST electroluminescent display device ac powered fabrication

IT Electroluminescent devices
Semiconductor device fabrication
(a.c.-powered electroluminescent device and fabrication method)

IT Polysulfides
Polyvinyl butyrals
RL: DEV (Device component use); USES (Uses)
(binder polymer; electroluminescent phosphor coated with light-emitting material)

IT Electroluminescent devices
(displays; a.c.-powered electroluminescent device and fabrication method)

IT Polyacetylenes, uses
Polyanilines
Polythiophenylenes
RL: DEV (Device component use); USES (Uses)
(electrode; a.c.-powered electroluminescent device and fabrication method)

IT Phosphors
(electroluminescent phosphor coated with light-emitting material)

IT Luminescent screens
(electroluminescent; a.c.-powered electroluminescent device and fabrication method)

IT Fluoropolymers, uses
Polyoxyalkylenes, uses
RL: DEV (Device component use); USES (Uses)
(light-emitting material; a.c.-powered electroluminescent device and fabrication method)

IT 9011-14-7, PMMA 39399-28-5, PVB
RL: DEV (Device component use); USES (Uses)
(binder polymer; electroluminescent phosphor coated with light-emitting material)

IT 25067-58-7, Polyacetylene 25190-62-9, Poly-p-phenylene 25233-34-5, Polythiophene 26499-97-8, Poly-m-phenylene 51555-21-6, Polycarbazole
RL: DEV (Device component use); USES (Uses)
(electrode; a.c.-powered electroluminescent device and fabrication method)

IT 1303-11-3, Indium arsenide (InAs), uses 1306-24-7, Cadmium selenide (CdSe), uses 1314-98-3, Zinc sulfide (ZnS), uses 1315-09-9, Zinc selenide (ZnSe) 12402-02-7, Yttrium oxide sulfide (YOS) 12442-27-2, Cadmium zinc sulfide (CdZnS) 13708-63-9, Terbium fluoride (TbF3) 13778-59-1, Lanthanum phosphate (LaPO4) 66199-87-9, Terbium fluoride (TbF)
RL: DEV (Device component use); USES (Uses)
(electroluminescent phosphor; a.c.-powered electroluminescent device and fabrication method)

IT 7439-96-5, Manganese, uses 7440-00-8, Neodymium, uses 7440-10-0, Praseodymium, uses 7440-22-4, Silver, uses 7440-27-9, Terbium, uses

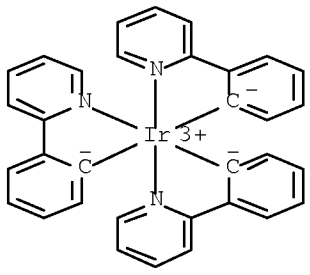
7440-50-8, Copper, uses 7440-52-0, Erbium, uses 7440-64-4, Ytterbium, uses
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(electroluminescent phosphor; a.c.-powered electroluminescent device and fabrication method)

IT 81-88-9 91-64-5D, Coumarin, derivs. 92-24-0, Tetracene 92-83-1, Xanthene 120-12-7, Anthracene, uses 148-24-3, 8-Hydroxyquinoline, uses 1239-45-8, Ethidium bromide 2085-33-8, Alq3 2321-07-5, Fluorescein 7439-93-2D, Lithium, salt 9002-85-1 9002-86-2 9002-89-5 9003-39-8 9003-53-6 9003-63-8 13558-31-1 13978-85-3, Bis(8-hydroxyquinolinato)zinc 14128-73-5 14284-95-8 17568-09-1 17904-83-5 17904-86-8 18130-95-5 24936-74-1 24937-16-4, Poly[imino(1-oxo-1,12-dodecanediyl)] 24937-78-8 24937-79-9 24979-70-2 24980-41-4 25013-01-8, Polypyridine 25014-41-9D, derivs. 25038-74-8 25067-59-8 25322-68-3 25535-16-4, Propidium iodide 26009-24-5, Poly-(p-phenylene vinylene) 26098-55-5 30604-81-0 43070-85-5D, Hydroxycoumarin, derivs. 62555-84-4 69031-04-5 75980-76-6, 4,6-Diamidino-2-phenylindole 94928-86-6 110981-38-9 110981-40-3 126213-51-2 133019-09-7, Poly(9,9-dihexyl-9H-fluorene-2,7-diyl) 138184-36-8, MEHPPV 142289-08-5 144810-07-1 157474-24-3 166534-30-1 170967-95-0 180179-60-6 184378-14-1 188201-14-1 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) 203806-96-6 229970-41-6 254445-51-7 313262-95-2 322727-85-5 338949-42-1 352546-68-0 354558-87-5 452311-41-0 474975-19-4 474975-20-7 474975-21-8 474975-22-9 474975-23-0 474975-24-1 474975-25-2 474975-26-3 475095-73-9 475095-75-1 475095-76-2 475095-77-3 475101-36-1 475102-03-5 475102-07-9 475102-09-1 475102-99-9 577705-40-9, Poly[2-(6-cyano-6-methylheptyloxy)-1,4-phenylene]
RL: DEV (Device component use); USES (Uses)
(light-emitting material; a.c.-powered electroluminescent device and fabrication method)

IT 94928-86-6 188201-14-1 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl)
RL: DEV (Device component use); USES (Uses)
(light-emitting material; a.c.-powered electroluminescent device and fabrication method)

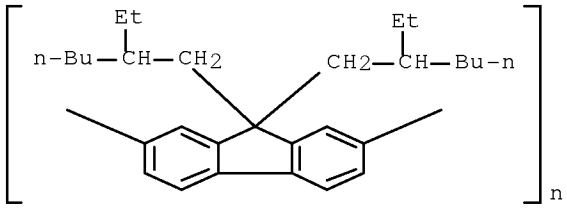
RN 94928-86-6 HCAPLUS

CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)

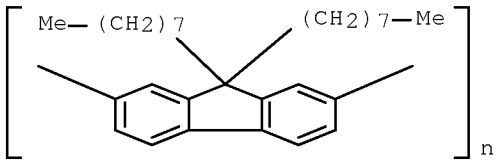


RN 188201-14-1 HCAPLUS

CN Poly[9,9-bis(2-ethylhexyl)-9H-fluorene-2,7-diyl] (CA INDEX NAME)



RN 195456-48-5 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



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Anon	1988			EP 0294061 A1	HCAPLUS
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Anon	2002				
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Anon	2002				
Anon	2002	185		201st Meeting of the	
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Araki	2002			US 6489045 B1	HCAPLUS
Article					
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Article Published	1983		954		
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Lehmann	1960			US 2924732 A	
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Matsumoto	2003			US 6613455 B1	HCAPLUS
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Murasko	2002			US 20020011786 A1	HCAPLUS
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Murasko	2002			US 20020159245 A1	HCAPLUS
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Murasko	2003			US 20030015962 A1	
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Reddy	1997			US 5702643 A	HCAPLUS
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Zovko |2003 | | |US 6611109 B2 |
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L113 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:78550 HCAPLUS Full-text
DN 140:154092
TI Light-emitting phosphor particles and electroluminescent devices employing same
IN Kinlen, Patrick J.
PA USA
SO U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20040018379	A1	20040129	US 2002-207576	20020729 <--
	US 7029763	B2	20060418		
	US 20040018382	A1	20040129	US 2003-352476	20030128 <--
	US 7361413	B2	20080422		
	CA 2493153	A1	20040205	CA 2003-2493153	20030718 <--
	WO 2004011250	A1	20040205	WO 2003-US22473	20030718 <--
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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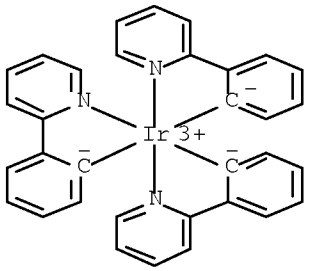
	EP 1542867	A1	20050622	EP 2003-771654	20030718 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2005535077	T	20051117	JP 2004-524640	20030718 <--
	US 20060127670	A1	20060615	US 2006-344934	20060201 <--
	US 7303827	B2	20071204		
PRAI	US 2002-207576	A2	20020729	<--	
	US 2003-352476	A	20030128	<--	
	WO 2003-US22473	W	20030718		

AB Phosphor particles are described which are coated with a light-emitting substance (e.g., a light-emitting polymer and/or a light-emitting small mol.). Methods of preparing the coated phosphors are described which entail coating phosphor particles with a light-emiting material. Electroluminescent displays employing the phosphors are also described. Methods for fabricating electroluminescent displays are described which entail formulating an ink by mixing phosphor particles with ≥1 binder polymer; depositing a conducting rear electrode onto a substrate in a pattern; depositing the ink onto the rear electrode to form a layer; optionally depositing a layer containing a light-emitting substance onto the layer; optionally depositing a transparent hole transporting electrode onto the layer; and depositing a front outlining electrode; and depositing connection leads to the rear electrode and the front outlining electrode.

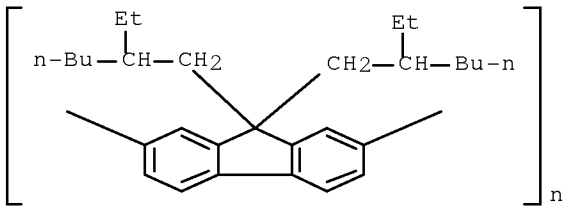
IC ICM H05B0033-14
ICS C09K0011-00
INCL 428690000; X42-891.7; X31-350.3; X31-350.4; X31-350.9; X42-7 6.6;

X42-721.2
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 74, 76
ST phosphor particle luminescent coating; electroluminescent display phosphor particle luminescent coating
IT Electroluminescent devices
(displays; phosphor particles with light-emitting coatings and their preparation and electroluminescent displays employing them and their fabrication)
IT Luminescent screens
(electroluminescent; phosphor particles with light-emitting coatings and their preparation and electroluminescent displays employing them and their fabrication)
IT Luminescent substances
Phosphors
Semiconductor device fabrication
(phosphor particles with light-emitting coatings and their preparation and electroluminescent displays employing them and their fabrication)
IT Fluoropolymers, uses
Poly(arylenealkenylenes)
Poly(arylenealkylenes)
Polyoxyalkylenes, uses
RL: DEV (Device component use); USES (Uses)
(phosphor particles with light-emitting coatings and their preparation and electroluminescent displays employing them and their fabrication)
IT 91-64-5D, Coumarin, derivs. 92-83-1, Xanthene 92-83-1D, Xanthene, derivs. 148-24-3, 8-Hydroxyquinoline, uses 1239-45-8, Ethidium bromide 2085-33-8 2321-07-5, Fluorescein 9002-85-1 9002-86-2 9002-89-5 9003-39-8 9003-53-6 9003-63-8 9011-14-7 13558-31-1 13978-85-3 14128-73-5 14642-34-3 17904-83-5 18130-95-5 24936-74-1 24937-78-8 24937-79-9 24979-70-2 24980-41-4 25013-01-8, Polypyridine 25014-41-9 25038-74-8 25322-68-3 25535-16-4, Propidium iodide 26009-24-5, Poly(p-phenylene vinylene) 26098-55-5 43070-85-5D, Hydroxycoumarin, derivs. 62555-84-4 75980-76-6, 4,6-Diamidino-2-phenylindole 94928-86-6 126213-51-2 133019-09-7, Poly(9,9-dihexyl-9H-fluorene-2,7-diyl) 138184-36-8, Poly[2-methoxy-5-(2'-ethylhexyloxy)-1,4-phenylenevinylene] 142289-08-5 144810-07-1 180179-60-6 184378-14-1 188201-14-1 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) 203806-96-6 313262-95-2 322727-85-5 338949-42-1 352546-68-0 474975-19-4 474975-20-7 474975-21-8 474975-22-9 474975-23-0 474975-24-1 474975-25-2 474975-26-3 475095-73-9 475095-75-1 475095-76-2 475095-77-3 475101-36-1 475102-03-5 475102-07-9 475102-09-1 475102-99-9 577705-40-9, Poly[2-(6-cyano-6-methylheptyloxy)-1,4-phenylene]
RL: DEV (Device component use); USES (Uses)
(phosphor particles with light-emitting coatings and their preparation and electroluminescent displays employing them and their fabrication)
IT 94928-86-6 188201-14-1 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl)
RL: DEV (Device component use); USES (Uses)
(phosphor particles with light-emitting coatings and their preparation and electroluminescent displays employing them and their fabrication)
RN 94928-86-6 HCAPLUS

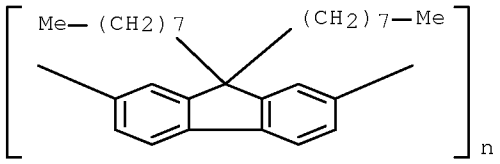
CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



RN 188201-14-1 HCAPLUS
CN Poly[9,9-bis(2-ethylhexyl)-9H-fluorene-2,7-diyl] (CA INDEX NAME)



RN 195456-48-5 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abe	2002			US 6406803 B1	HCAPLUS
Albert	2002			US 6392786 B1	
Albert	2004			US 20040217929 A1	HCAPLUS
Andriessen	2004			US 6706551 B1	HCAPLUS
Anon					
Anon	1988			EP 0294061 A1	HCAPLUS
Anon	1998			WO 9853645	HCAPLUS
Anon	2003			International Applic	
Anon	2002			http://ncsr.csci-va.	
Anon				http://www.geocities	
Anon	2002			http://www.i-compone	

Araki	2002			US 6489045 B1	HCAPLUS
Ballard	1983		954	J. Chem. Soc.	HCAPLUS
Barnardo	2003			US 20030140768 A1	
Bayless	2003			US 6562460 B1	HCAPLUS
Bradley	1987	20	1389	J. Phys. D	HCAPLUS
Brese	1997			US 5643496 A	HCAPLUS
Budd	1997			US 5593782 A	HCAPLUS
Burbank	1996			US 5583394 A	HCAPLUS
Chadha	1997			US 5635110 A	HCAPLUS
Chiang	2003			US 20030099884 A1	HCAPLUS
Duggal	2003			US 20030094626 A1	HCAPLUS
Duggal	2004			US 6777724 B1	HCAPLUS
Eguchi	1987			US 4672265 A	
Epstein	2001			US 20010030325 A1	HCAPLUS
Fischer	1981			US 4263339 A	HCAPLUS
Friend	1993			US 5247190 A	
Friend	2002			US 6498049 B1	HCAPLUS
Friend	1998	4	37	Journal of Molecular	
Han	1999	20		Bull. Korean Chem. S	
Hebbink	2002	14	1147	Advanced Materials	HCAPLUS
Ikeda	2003			US 6559449 B1	HCAPLUS
Janusauskas	1999			US 5976613 A	HCAPLUS
Jones	2001			US 6198220 B1	HCAPLUS
Kang	1997			US 5675217 A	HCAPLUS
Karam	1994			US 5309071 A	HCAPLUS
Katayama	1997			US 5612591 A	HCAPLUS
Kido	2002	102	2357	Chem. Rev.	HCAPLUS
Kinlen	2004			US 20040018382 A1	HCAPLUS
Kojima	1982	21	860	Japanese Journal of	HCAPLUS
Kreiling	1989			US 4857416 A	
Kunimoto	2001			US 6258954 B1	HCAPLUS
LaPointe	1997			US 5598058 A	HCAPLUS
Lee	1999			US 5912533 A	HCAPLUS
Lee	2003			US 6610223 B1	HCAPLUS
Lehmann	1960			US 2924732 A	
Lieberman	2002			http://www.eetimes.c	
Mash	1962			US 3052810 A	
Matsumoto	2003			US 6613455 B1	HCAPLUS
McNulty	2003			US 20030111955 A1	HCAPLUS
McNulty	2005			US 6903505 B1	HCAPLUS
Mueller	1997			US 5700592 A	HCAPLUS
Murasko	1995			US 5426792 A	
Murasko	1996			US 5552679 A	
Murasko	2001			US 20010035716 A1	HCAPLUS
Murasko	2001			US 20010042329 A1	HCAPLUS
Murasko	2001			US 6203391 B1	HCAPLUS
Murasko	2002			US 20020011786 A1	HCAPLUS
Murasko	2002			US 20020155214 A1	HCAPLUS
Murasko	2002			US 20020157173 A1	
Murasko	2002			US 20020159245 A1	HCAPLUS
Murasko	2002			US 20020159246 A1	
Murasko	2002			US 6424088 B1	HCAPLUS
Murasko	2003			US 20030015962 A1	
Murasko	2003			US 20030032361 A1	HCAPLUS
Namiki	1995			US 5457565 A	HCAPLUS
Okajima	1997			US 5700591 A	HCAPLUS
Onitsuka	2000			US 6023371 A	
Orgacon Conductive Tran	2001			Patterning Orgacon F	
Pei	1997			US 5682043 A	HCAPLUS
Petersen	1997			US 5667724 A	HCAPLUS

Pope	2001			US 6218774 B1	HCAPLUS
Reddy	1997			US 5702643 A	HCAPLUS
Reddy	1998			US 5711898 A	HCAPLUS
Simopoulos	1989			US 4855189 A	HCAPLUS
Skotheim	1998		823	Handbook of Conducti	
Solanki	1997			US 5602445 A	HCAPLUS
Stenger-Smith	1989	30		Polymer	HCAPLUS
Sun	1994			US 5309070 A	HCAPLUS
Sun	1997			US 5598059 A	HCAPLUS
Sun	1997			US 5677594 A	HCAPLUS
Suyver	2002	185		201st Meeting of the	
Suyver	2001	1	429	Nano Letters	HCAPLUS
Tomozawa	1989	28	C687	Synthetic Metals	HCAPLUS
Tonomura	1996			US 5554449 A	
VanSlyke	1985			US 4539507 A	
Vij, Plenum Press, New	1998		221	Luminescence of Soli	
Watanabe	1996			US 5543237 A	HCAPLUS
Whitney	2000			US 6053795 A	
Williams	1971			US 3621321 A	HCAPLUS
Zovko	2003			US 6611109 B1	

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L113 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:972158 HCAPLUS Full-text
DN 140:33402
TI Phosphorescent and luminescent conjugated polymers and their use in electroluminescent assemblies
IN Marsitzky, Dirk; Heuer, Helmut-Werner; Wehrmann, Rolf; Elschner, Andreas; Reuter, Knud; Sautter, Armin
PA H.C. Starck G.m.b.H., Germany
SO PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003102109	A1	20031211	WO 2003-EP5699	20030530 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10224617	A1	20031224	DE 2002-10224617	20020604 <--
DE 10311767	A1	20040930	DE 2003-10311767	20030318 <--
AU 2003238177	A1	20031219	AU 2003-238177	20030530 <--
EP 1513911	A1	20050316	EP 2003-735504	20030530 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1671819	A	20050921	CN 2003-818435	20030530 <--
CN 100353581	C	20071205		
JP 2005528508	T	20050922	JP 2004-510351	20030530 <--
US 20060093852	A1	20060504	US 2005-516627	20051107 <--
HK 1083347	A1	20080808	HK 2006-103318	20060315 <--

PRAI DE 2002-10224617 A 20020604 <--
DE 2003-10311767 A 20030318 <--
WO 2003-EP5699 W 20030530 <--

AB Phosphorescent or luminescent conjugated polymers are described whose emission is based on the phosphorescence of covalently bonded metal complexes, optionally combined with the fluorescence of the polymer chain. Method for producing the polymers are described which entail reacting an uncomplexed ligand polymer with an Ir(III), Pt(II), Os(II), or Rh (III) precursor complex. The use of the polymer complexes in electroluminescent assemblies, electroluminescent device employing the complexes, and methods for producing electroluminescent devices entailing applying a solution of a polymer(s) to an appropriate substrate are also described.

IC ICM C09K0011-06
ICS C08G0061-02; H05B0033-14; C07F0015-00; H01L0051-20

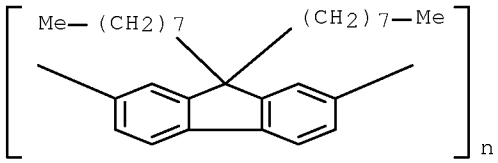
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 76

IT 195456-48-5DP, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl), reaction products with metal complexes
337526-80-4DP, reaction products with polymers
343978-72-3DP, reaction products with polymers
417705-49-8DP, reaction products with polymers
439675-33-9DP, reaction products with metal complexes 603109-48-4DP, reaction products with polymers 632297-35-9DP, reaction products with polymers 632326-35-3DP, reaction products with polymers 633290-76-3DP, reaction products with metal complexes
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(phosphorescent and luminescent conjugated polymers and their preparation use in electroluminescent devices and the devices and their fabrication)

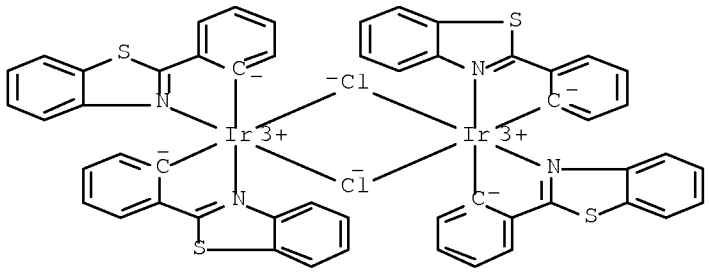
IT 7440-04-2DP, Osmium, complexes, reaction products with polymers 7440-06-4DP, Platinum, complexes, reaction products with polymers
7440-16-6DP, Rhodium, complexes, reaction products with polymers
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(phosphorescent and luminescent conjugated polymers and their preparation use in electroluminescent devices and the devices and their fabrication)

IT 195456-48-5DP, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl), reaction products with metal complexes
337526-80-4DP, reaction products with polymers
343978-72-3DP, reaction products with polymers
417705-49-8DP, reaction products with polymers
439675-33-9DP, reaction products with metal complexes 603109-48-4DP, reaction products with polymers 632297-35-9DP, reaction products with polymers 632326-35-3DP, reaction products with polymers 633290-76-3DP, reaction products with metal complexes
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(phosphorescent and luminescent conjugated polymers and their preparation use in electroluminescent devices and the devices and their fabrication)

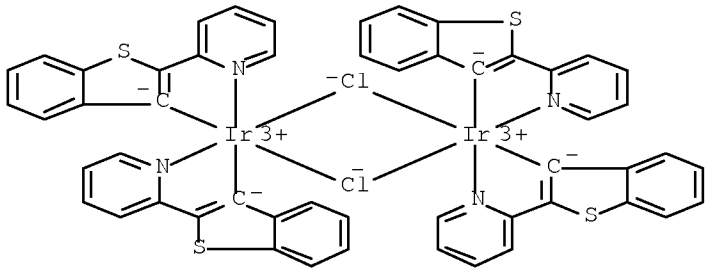
RN 195456-48-5 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



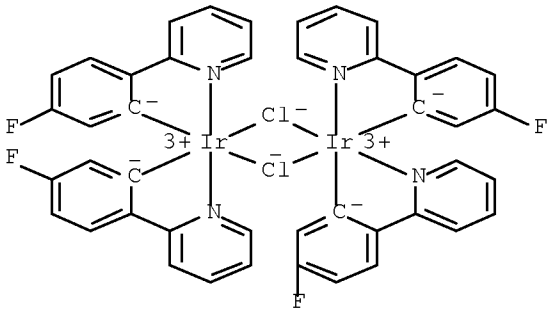
RN 337526-80-4 HCAPLUS
CN Iridium, tetrakis[2-(2-benzothiazolyl-κN3)phenyl-κC]di-μ-chlorodi-, stereoisomer (CA INDEX NAME)



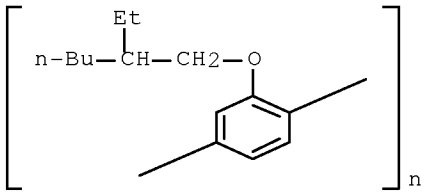
RN 343978-72-3 HCAPLUS
CN Iridium, di-μ-chlorotetrakis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]di- (CA INDEX NAME)



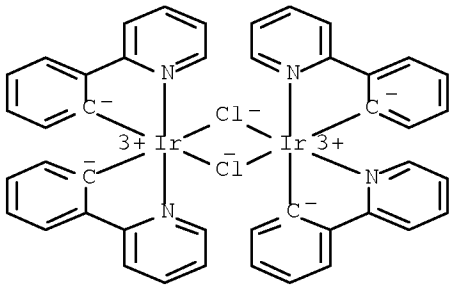
RN 417705-49-8 HCAPLUS
CN Iridium, di-μ-chlorotetrakis[5-fluoro-2-(2-pyridinyl-κN)phenyl-κC]di- (CA INDEX NAME)



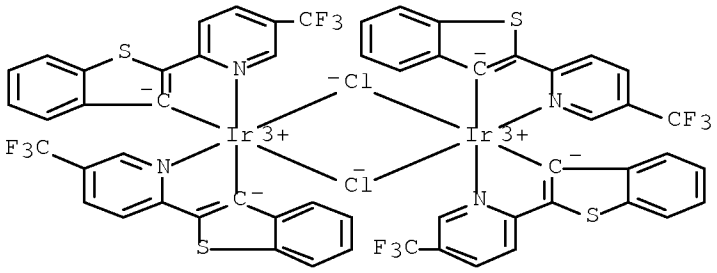
RN 439675-33-9 HCAPLUS
CN Poly[2-[(2-ethylhexyl)oxy]-1,4-phenylene] (CA INDEX NAME)



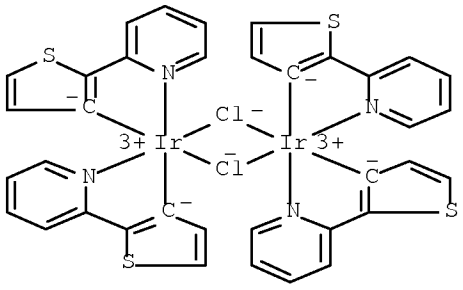
RN 603109-48-4 HCAPLUS
CN Iridium, di-μ-chlorotetrakis[2-(2-pyridinyl-κN)phenyl-κC]di-
(CA INDEX NAME)



RN 632297-35-9 HCAPLUS
CN Iridium, di-μ-chlorotetrakis[2-[5-(trifluoromethyl)-2-pyridinyl-
κN]benzo[b]thien-3-yl-κC]di- (9CI) (CA INDEX NAME)



RN 632326-35-3 HCAPLUS
CN Iridium, di-μ-chlorotetrakis[2-(2-pyridinyl-κN)-3-thienyl-κC]di- (9CI) (CA INDEX NAME)



RN 633290-76-3 HCAPLUS
CN Poly[pyridinediyl(9,9-dioctyl-9H-fluorene-2,7-diyl)] (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 7440-04-2DP, Osmium, complexes, reaction products with polymers 7440-06-4DP, Platinum, complexes, reaction products with polymers
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(phosphorescent and luminescent conjugated polymers and their preparation use in electroluminescent devices and the devices and their fabrication)
RN 7440-04-2 HCAPLUS
CN Osmium (CA INDEX NAME)

Os

RN 7440-06-4 HCAPLUS
CN Platinum (CA INDEX NAME)

Pt

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Japan Broadcasting Corp	2003			WO 03018653 A	HCAPLUS
Ng, P	1997	18	1009	MACROMOLECULAR: RAPI	HCAPLUS
Sumitomo Chemical Co	2001			EP 1138746 A	HCAPLUS
Sumitomo Chemical Co	2002			EP 1245659 A	HCAPLUS
Takeuchi, M	2003			WO 03001616 A	HCAPLUS
Wong, C	1999	11	455	ADVANCED MATERIALS	HCAPLUS
Wong, W	2002	35	3506	MACROMOLECULES	HCAPLUS

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L113 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:875368 HCAPLUS Full-text
DN 139:365744
TI Solution-processable phosphorescent materials
IN Holmes, Andrew; Sandee, Albertus; Williams, Charlotte; Koehler, Anna; Evans, Nick
PA Cambridge University Technical Services Limited, UK
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003091355	A2	20031106	WO 2003-GB1765	20030424 <--
	WO 2003091355	A3	20040304		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003227881	A1	20031110	AU 2003-227881	20030424 <--
	EP 1501907	A2	20050202	EP 2003-725341	20030424 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2005524725	T	20050818	JP 2003-587896	20030424 <--
	CN 1662628	A	20050831	CN 2003-814689	20030424 <--
	CN 100355856	C	20071219		
	CN 101230263	A	20080730	CN 2007-10167956	20030424 <--
	CN 101230264	A	20080730	CN 2007-10167957	20030424 <--
	US 20060063026	A1	20060323	US 2005-511954	20050711 <--
	HK 1081984	A1	20080822	HK 2006-102082	20060217 <--
PRAI	GB 2002-9652	A	20020426 <--		
	CN 2003-814689	A3	20030424 <--		
	WO 2003-GB1765	W	20030424 <--		

AB A material capable of luminescence comprising: a polymer or oligomer; and an organometallic group characterized in that the polymer or oligomer is at least partially conjugated and the organometallic group is covalently bound to the polymer or oligomer and the nature, location and/or proportion of the polymer or oligomer and of the organometallic group in the material are selected so

that the luminescence predominantly is phosphorescence. The phosphorescent materials are useful for OLED (organic light-emitting diodes), etc.

IC ICM C09K

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 29, 73, 76

ST OLED phosphorescent material conjugated polymer organometallic compd luminescence

IT Electroluminescent devices
Electroluminescent devices
Fluorescence
(manufacture of solution-processable phosphorescent materials useful for OLED)

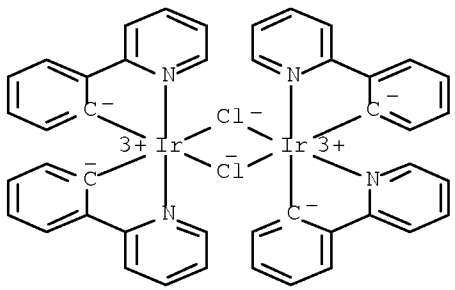
IT 7439-88-5DP, Iridium, conjugated polymer complexes
63996-36-1DP, 2-(4-Bromophenyl)pyridine, conjugated polymer terminated products with, Ir complexes 92220-65-0DP, conjugated polymer terminated products 195456-48-5DP, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl), pyridyphenyl-terminated, iridium complex 198964-76-0DP, 2,7-Di(4,4,5,5-tetramethyl-1,3,2-dioxaboronate)-9,9-dioctylfluorene-2,7-dibromo-9,9-dioctylfluorene copolymer, pyridyphenyl-terminated, iridium complex 620624-90-0DP, conjugated polymer terminated products
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of solution-processable phosphorescent materials useful for OLED)

IT 63996-36-1P, 2-(4-Bromophenyl)pyridine 80389-85-1P 620624-90-0P 620624-92-2P 620624-96-6P 620624-98-8P 620625-01-6P 620625-03-8P 620625-05-0P 620625-07-2P 620625-09-4P 620625-10-7P 620625-11-8P 620625-12-9P 620625-13-0P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manufacture of solution-processable phosphorescent materials useful for OLED)

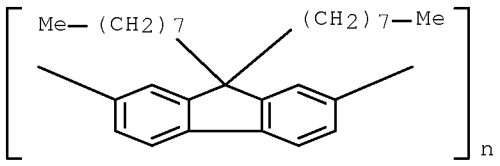
IT 92220-65-0DP, conjugated polymer terminated products
195456-48-5DP, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl), pyridyphenyl-terminated, iridium complex 620624-90-0DP, conjugated polymer terminated products
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of solution-processable phosphorescent materials useful for OLED)

RN 92220-65-0 HCAPLUS

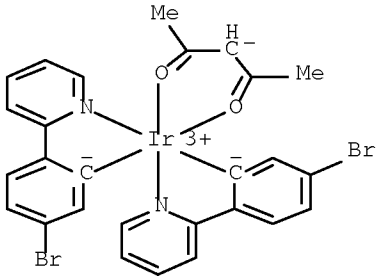
CN Iridium, di-μ-chlorotetrakis[2-(2-pyridinyl-κN)phenyl-κC]di-, stereoisomer (CA INDEX NAME)



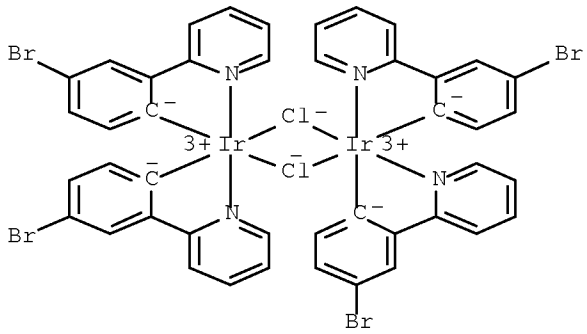
RN 195456-48-5 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



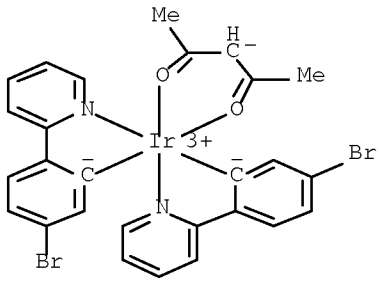
RN 620624-90-0 HCAPLUS
CN Iridium, bis[5-bromo-2-(2-pyridinyl-κN)phenyl-κC](2,4-pentanedionato-κO,κO')- (9CI) (CA INDEX NAME)



IT 80389-85-1P 620624-90-0P 620625-10-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manufacture of solution-processable phosphorescent materials useful for OLED)
RN 80389-85-1 HCAPLUS
CN Iridium, tetrakis[4-bromo-2-(2-pyridinyl-κN)phenyl-κC]di-μ-chlorodi-, stereoisomer (CA INDEX NAME)

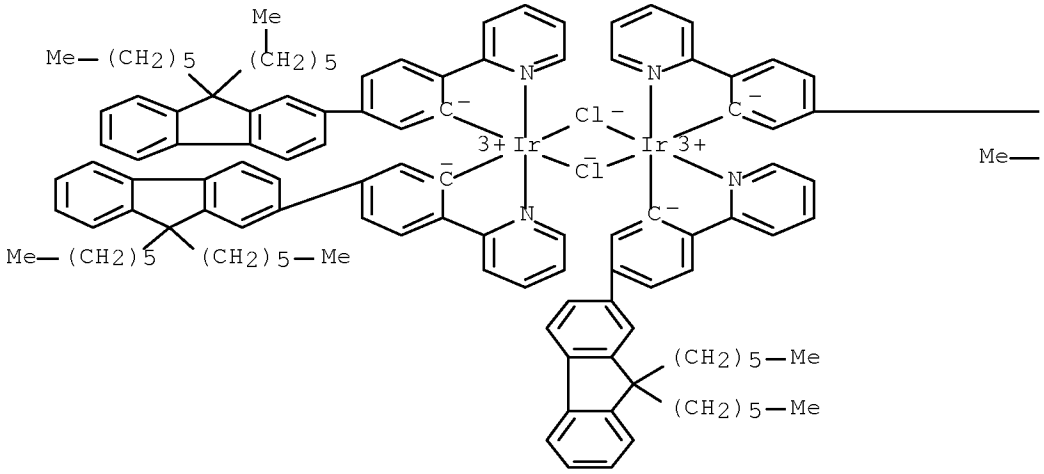


RN 620624-90-0 HCAPLUS
CN Iridium, bis[5-bromo-2-(2-pyridinyl-κN)phenyl-κC](2,4-pentanedionato-κO,κO')- (9CI) (CA INDEX NAME)

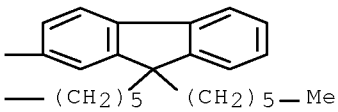


RN 620625-10-7 HCAPLUS
CN Iridium, di-μ-chlorotetrakis[5-(9,9-dihexyl-9H-fluoren-2-yl)-2-(2-pyridinyl-κN)phenyl-κC]di- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				WO 0231896 A2	HCAPLUS

Anon				WO 03001616 A2	HCAPLUS
Anon				WO 03018653 A1	HCAPLUS
Anon				EP 1138746 A1	HCAPLUS
Anon				EP 1245659 A1	HCAPLUS
Anon				US 20010019782 A1	
Anon				US 5442021 A	HCAPLUS

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L113 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:850364 HCAPLUS Full-text
DN 140:43028
TI Energy transfer and triplet exciton confinement in polymeric electrophosphorescent devices
AU Chen, Fang-Chung; Chang, Shun-Chi; He, Gufeng; Pyo, Seungmoon; Yang, Yang; Kurotaki, Masayuki; Kido, Junji
CS Department of Materials Science and Engineering, University of California at Los Angeles, Los Angeles, CA, 90095, USA
SO Journal of Polymer Science, Part B: Polymer Physics (2003), 41(21), 2681-2690
CODEN: JPBPEM; ISSN: 0887-6266
PB John Wiley & Sons, Inc.
DT Journal
LA English
AB Energy transfer and triplet exciton confinement in polymer /phosphorescent dopant systems were investigated. Various combinations of host-guest systems were studied, consisting of 2 host polymers, poly(vinylcarbazole) (PVK) and poly[9,9-bis(octyl)-fluorene-2,7-diyl] (PF), blended with 5 different phosphorescent iridium complexes with different triplet energy levels. These combinations of hosts and dopants provide an ideal situation for studying the movement of triplet excitons between the host polymers and dopants. The excitons either can be confined at the dopant sites or can flow to the host polymers , subject to the relative position of the triplet energy levels of the material. For PF, because of its low triplet energy level, the exciton can flow back from the dopants to PF when the dopant has a higher triplet energy and subsequently quench the device efficiency. In contrast, efficient electrophosphorescence was observed in doped PVK films because of the high triplet energy level of PVK. Better energy transfer from PVK to the dopants, as well as triplet exciton confinement on the dopants, leads to higher device performance than found in PF devices. Efficiencies as high as 16, 8.0, and 2.6 cd/A for green, yellow, and red emissions, resp., can be achieved when PVK is selected as the host polymer. The results in this study show that the energy transfer and triplet exciton confinement have a pronounced influence on the device performance. In addition, this study also provides material design and selection rules for the efficient phosphorescent polymer light-emitting diodes.
CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 73
ST electroluminescent device polymeric energy transfer triplet exciton confinement; polyvinylcarbazole LED energy transfer triplet exciton confinement; polydioctylfluorene LED energy transfer triplet exciton confinement
IT Electric current-potential relationship
HOMO (molecular orbital)
LUMO (molecular orbital)
Luminescence
Luminescence, electroluminescence
Oxidation potential
Reduction potential
Triplet state
(energy transfer and triplet exciton confinement in polymeric

electrophosphorescent devices)

IT Electroluminescent devices
(polymeric; energy transfer and triplet exciton confinement in polymeric electrophosphorescent devices)

IT Exciton
(triplet; energy transfer and triplet exciton confinement in polymeric electrophosphorescent devices)

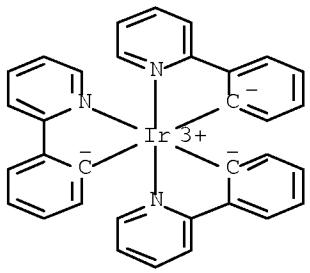
IT 94928-86-6, Tris(2-phenylpyridine) iridium 337526-85-9, Acetylacetonatobis[2-(2-pyridyl)phenyl]iridium 337526-88-2 343978-79-0 474948-25-9
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(dopant; energy transfer and triplet exciton confinement in polymeric electrophosphorescent devices)

IT 25067-59-8, Poly(vinylcarbazole) 195456-48-5, Poly[9,9-dioctyl-9H-fluorene-2,7-diyl]
RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
(doped; energy transfer and triplet exciton confinement in polymeric electrophosphorescent devices)

IT 94928-86-6, Tris(2-phenylpyridine) iridium 337526-85-9, Acetylacetonatobis[2-(2-pyridyl)phenyl]iridium 337526-88-2 343978-79-0 474948-25-9
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(dopant; energy transfer and triplet exciton confinement in polymeric electrophosphorescent devices)

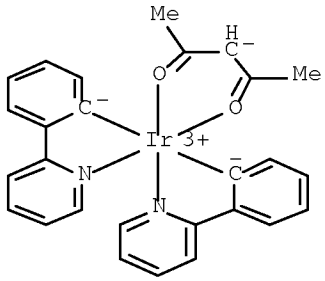
RN 94928-86-6 HCAPLUS

CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)

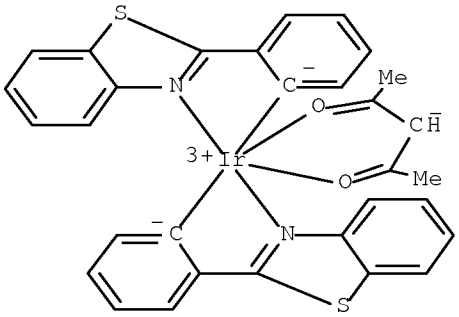


RN 337526-85-9 HCAPLUS

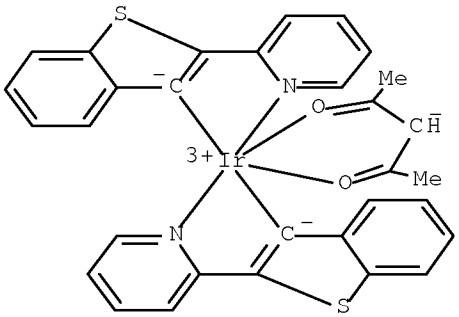
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-33)- (CA INDEX NAME)



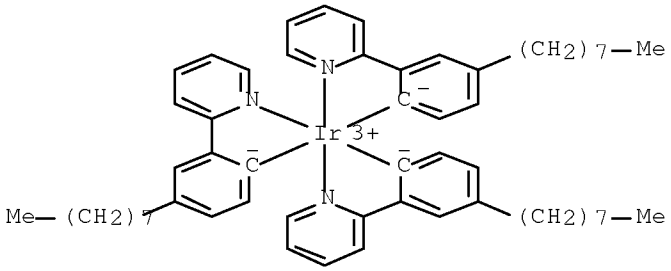
RN 337526-88-2 HCAPLUS
CN Iridium, bis[2-(2-benzothiazolyl-κN3)phenyl-κC](2,4-pentanedionato-κO2,κO4)-, (OC-6-33)- (CA INDEX NAME)



RN 343978-79-0 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]-, (OC-6-33)- (CA INDEX NAME)



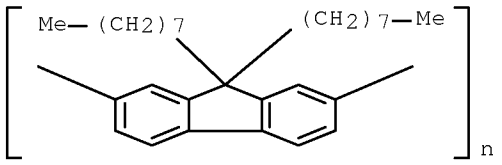
RN 474948-25-9 HCAPLUS
CN Iridium, tris[4-octyl-2-(2-pyridinyl-κN)phenyl-κC]- (CA INDEX NAME)



IT 195456-48-5, Poly[9,9-dioctyl-9H-fluorene-2,7-diyl]

RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
(doped; energy transfer and triplet exciton confinement in polymeric electrophosphorescent devices)

RN 195456-48-5 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adachi, C	2001	79	2082	Appl Phys Lett	HCAPLUS
Adachi, C	2001	90	5048	J Appl Phys	HCAPLUS
Baldo, M	1999	75	4	Appl Phys Lett	HCAPLUS
Baldo, M	1998	395	151	Nature	HCAPLUS
Baldo, M	1999	60	14422	Physical Review B	HCAPLUS
Baldo, M	2000	62	10958	Physical Review B	HCAPLUS
Chang, S	2001	79	2088	Appl Phys Lett	HCAPLUS
Chen, F	2003	82	1006	Appl Phys Lett	HCAPLUS
Chen, F				J Phys Chem B, to be	
Dexter, D	1953	21	836	J Chem Phys	HCAPLUS
Forster, T	1959	27	7	Discuss Faraday Soc	
Guo, T	2001	1	15	Org Electron	
Itaya, A	1998	146	570	Chem Phys Lett	
Janietz, S	1998	73	2453	Appl Phys Lett	HCAPLUS
Kawamura, Y	2002	92	87	J Appl Phys	HCAPLUS
King, K	1985	107	1432	J Am Chem Soc	
Kolosov, D	2002	124	9945	J Am Chem Soc	HCAPLUS
Kwong, R	2000	12	1134	Adv Matter	HCAPLUS
Lamansky, S	2001	40	1704	Inorg Chem	HCAPLUS
Lamansky, S	2001	123	4304	J Am Chem Soc	HCAPLUS
Lamansky, S	2001	2	53	Org Electron	HCAPLUS
Lane, P	2001	63	235206	Phys Rev B	
Lee, C	2000	77	2280	Appl Phys Lett	HCAPLUS
O'Brien, D	2001	116	379	Synth Met	HCAPLUS
Rippen, G	1980	52	165	Chem Phys	HCAPLUS
Rothe, C	2002	65	073201	Physical Review B	
Shaheen, S	1999	85	7939	J Appl Phys	HCAPLUS
Shoustikov, A	1998	4	3	IEEE J Sel Top Quant	HCAPLUS
Shuai, Z	2000	84	131	Phys Rev Lett	HCAPLUS
Turro, N	1991			Modern Molecular Pho	
Vaeth, K	2002	92	3447	J Appl Phys	HCAPLUS
Wilson, J	2001	413	828	Nature	HCAPLUS
Wohlgenannt, M	2001	409	494	Nature	HCAPLUS
Wu, C	1997	44	1269	IEEE Trans Electron	HCAPLUS
Yang, M	2000	39	L828	Jpn J Appl Phys	HCAPLUS

OSC.G 67 THERE ARE 67 CAPLUS RECORDS THAT CITE THIS RECORD (67 CITINGS)

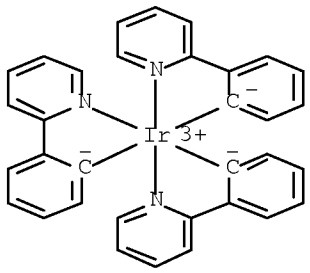
L113 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2003:200759 HCAPLUS Full-text
DN 138:245292
TI Organic electroluminescent devices
IN Tsuge, Hodaka; Komatsuzaki, Akihiro
PA Honda Motor Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

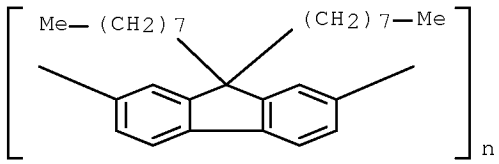
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003077673	A	20030314	JP 2001-297338	20010927 <--
PRAI JP 2001-185486	A	20010619 <--		

AB The devices comprise: a glass substrate; an ITO electrode; and a hole transport, a phosphor, an electron transport, and a metal electrode layer, where the phosphor layer comprises a dopant and a conductive polymer host poly(9-R,9-R-9H-carbazol-2,7-diyl) and/or poly(9-R-9H-carbazol-3,6-diyl) (R = H, aliphatic or aromatic hydrocarbon, ether, heterocyclic group).
IC ICM H05B0033-14
ICS C09K0011-06; H05B0033-10; H05B0033-22; C07D0213-16; C07D0277-66; C07D0409-14
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescent device
IT Anodes
Cathodes
Doping
Electronics
Phosphorescence
(organic electroluminescent devices)
IT Polymers, uses
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices)
IT Aromatic hydrocarbons, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(organic electroluminescent devices)
IT 2085-33-8, Tris(8-quinolinolato)aluminum 4733-39-5 15082-28-7 25067-59-8, 9H-Carbazole, 9-ethenyl-, homopolymer 50926-11-9, ITO 94928-86-6 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) 330649-87-1, Poly(9,9-diphenyl-9H-fluorene-2,7-diyl) 483306-63-4 483306-68-9 501355-43-7, Poly(9-phenyl-9H-carbazole-3,6-diyl) 501355-44-8 501355-45-9 501355-46-0 501355-47-1 501355-48-2, Poly(9,9-dicarboxy-9H-fluorene-2,7-diyl) 501355-49-3, Poly(9-propoxy-9H-carbazole-3,6-diyl) 501355-50-6, Poly(9-butoxy-9H-carbazole-3,6-diyl) 501355-51-7 501355-52-8 501355-53-9 501355-54-0 501355-55-1, Poly(9-carboxy-9H-carbazole-3,6-diyl)
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices)
IT 56-23-5, Tetrachloromethane, reactions 75-05-8, Acetonitrile, reactions 75-52-5, Nitromethane, reactions 79-24-3, Nitroethane 90-11-9, α-Bromonaphthalene 100-41-4, Ethylbenzene, reactions 108-38-3, m-Xylene, reactions 108-87-2, Methylcyclohexane 109-66-0, n-Pentane, reactions 110-54-3, Hexane, reactions 110-82-7, Cyclohexane, reactions 111-65-9, n-Octane, reactions 124-18-5, n-Decane 142-82-5, Heptane, reactions 540-54-5, 1-Chloropropane 872-05-9, 1-Decene
RL: RCT (Reactant); RACT (Reactant or reagent)
(organic electroluminescent devices)

IT 94928-86-6 195456-48-5,
Poly(9,9-dioctyl-9H-fluorene-2,7-diyl)
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices)
RN 94928-86-6 HCAPLUS
CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



RN 195456-48-5 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L113 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:954416 HCAPLUS Full-text
DN 138:114713
TI High-Efficiency Red-Light Emission from Polyfluorenes Grafted with Cyclometalated Iridium Complexes and Charge Transport Moiety
AU Chen, Xiwen; Liao, Jin-Long; Liang, Yongmin; Ahmed, M. O.; Tseng, Hao En; Chen, Show An
CS Chemical Engineering Department, National Tsing-Hua University, Hsinchu, 30013, Taiwan
SO Journal of the American Chemical Society (2003), 125(3), 636-637
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
AB The authors report a new route for the design of electroluminescent polymers by grafting high-efficiency phosphorescent organometallic complexes as dopants and charge transport moieties onto alkyl side chains of fully conjugated polymers for polymer light-emitting diodes (PLED) with single layer/single polymers. The polymer system studied involves polyfluorene (PF) as the base conjugated polymer, carbazole (Cz) as the charge transport moiety and a source for green emission by forming an electroplex with the PF main chain, and cyclometalated Ir complexes as the phosphorescent dopant. Energy transfer from the green Ir complex or an electroplex formed between the fluorene main

chain and side-chain carbazole moieties, in addition to that from the PF main chain, to the red Ir complex can significantly enhance the device performance, and a red light-emitting device with the high efficiency 2.8 cd/A at 7 V and 65 cd/m2, comparable to that of the same Ir complex-based OLED, and a broad-band light-emitting device containing blue, green, and red peaks (2.16 cd/A at 9 V) were obtained.

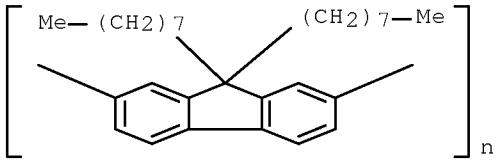
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

IT 51555-21-6D, reaction products with iridium pentanedionatophenyl complex 195456-48-5D, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl), reaction products with iridium pentanedionatophenyl complex 337527-01-2D, reaction products with polyfluorenes 343978-79-0D, reaction products with polyfluorenes
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(high-efficiency red-light emission from polyfluorenes grafted with cyclometalated iridium complexes and charge transport moiety)

IT 195456-48-5D, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl), reaction products with iridium pentanedionatophenyl complex 337527-01-2D, reaction products with polyfluorenes 343978-79-0D, reaction products with polyfluorenes
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(high-efficiency red-light emission from polyfluorenes grafted with cyclometalated iridium complexes and charge transport moiety)

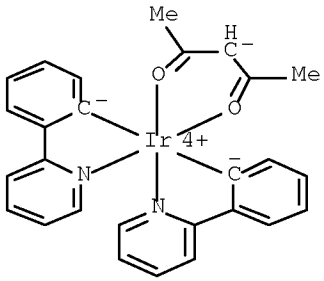
RN 195456-48-5 HCAPLUS

CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



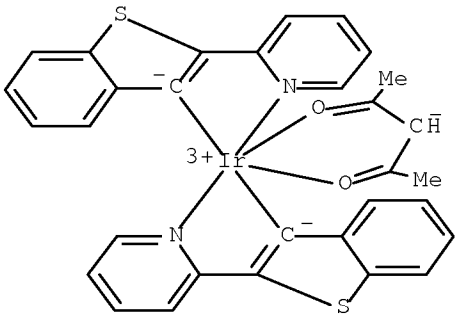
RN 337527-01-2 HCAPLUS

CN Iridium(1+), (2,4-pentanedionato-κO,κO')bis[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-33)- (9CI) (CA INDEX NAME)



RN 343978-79-0 HCAPLUS

CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]-, (OC-6-33)- (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adachi, C	2000	77	904	Appl Phys Lett	HCAPLUS
Adachi, C	2001	78	1622	Appl Phys Lett	HCAPLUS
Adachi, C	2001	90	5048	J Appl Phys	HCAPLUS
Baldo, M	1999	75	4	Appl Phys Lett	HCAPLUS
Baldo, M	1998	395	151	Nature	HCAPLUS
Baldo, M	2000	403	750	Nature	HCAPLUS
Chen, F	2002	80	2308	Appl Phys Lett	HCAPLUS
D'Andrade, B	2002	14	147	Adv Mater	HCAPLUS
Gong, X	2002	14	581	Adv Mater	HCAPLUS
Granlund, T	1997	81	8097	J Appl Phys	HCAPLUS
Jiang, X	2002	91	6717	J Appl Phys	HCAPLUS
Kawamura, Y	2002	92	87	J Appl Phys	HCAPLUS
Lamansky, S	2001	123	4304	J Am Chem Soc	HCAPLUS
Lamansky, S	2001	2	53	Org Electron	HCAPLUS
Lee, C	2000	77	2280	Appl Phys Lett	HCAPLUS
Lee, Y	2001	123	2296	J Am Chem Soc	HCAPLUS
Peng, K	2001	123	11388	J Am Chem Soc	HCAPLUS
Zhu, W	2002	80	2045	Appl Phys Lett	HCAPLUS

OSC.G 203 THERE ARE 203 CAPLUS RECORDS THAT CITE THIS RECORD (203 CITINGS)

L113 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:849341 HCAPLUS Full-text
DN 137:377516
TI Electroluminescent devices fabricated with encapsulated light emitting polymer particles
IN Murasko, Matthew; Kinlen, Patrick J.; St. John, Brent
PA Lumimove, Inc., USA
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002087308	A2	20021107	WO 2002-US13547	20020430 <--
	WO 2002087308	A3	20030501		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2473969	A1	20021107	CA 2002-2473969	20020430	<--
AU 2002259077	A1	20021111	AU 2002-259077	20020430	<--
US 20030032361	A1	20030213	US 2002-135599	20020430	<--
US 7001639	B2	20060221			
US 20060251798	A1	20061109	US 2005-260738	20051027	<--
PRAI US 2001-287321P	P	20010430	<--		
US 2001-287612P	P	20010430	<--		
US 2002-135599	A3	20020430	<--		
WO 2002-US13547	W	20020430	<--		

AB Methods for fabricating electroluminescent display devices are described which entail encapsulating organic light-emitting material particles with a conductive polymer; formulating an ink by mixing the encapsulated particles with binder polymers; depositing a conducting rear electrode onto a substrate in a pattern; depositing the ink onto rear electrode patterns to form a light-emitting layer; depositing a transparent hole transporting electrode onto the light-emitting layer; depositing a front outlining electrode onto the hole transporting electrode; and depositing connection leads to the rear electrode and the front outlining electrode.

IC ICM H05B

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 73, 76

ST electroluminescent display fabrication polymer encapsulated light emitting particle

IT Electroluminescent devices
(displays; electroluminescent display fabrication using polymer-encapsulated light-emitting particles)

IT Semiconductor device fabrication
(electroluminescent display fabrication using polymer -encapsulated light-emitting particles)

IT Fluoropolymers, uses
Poly(arylenealkenylenes)
Polyamides, uses
Polyanilines
Polycarbonates, uses
Polyesters, uses
Polyoxyalkylenes, uses
Polysulfones, uses
Polyvinyl butyrals
RL: DEV (Device component use); USES (Uses)
(electroluminescent display fabrication using polymer -encapsulated light-emitting particles)

IT Luminescent screens
(electroluminescent; electroluminescent display fabrication using polymer-encapsulated light-emitting particles)

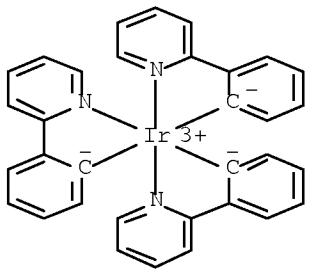
IT 2085-33-8, Tris(8-hydroxyquinolato)aluminum 9002-85-1, Poly(vinylidene chloride) 9002-86-2, Poly(vinylchloride) 9002-89-5, Poly(vinylalcohol) 9003-39-8, Poly(vinylpyrrolidone) 9003-53-6, Polystyrene 9003-63-8, Poly(butylmethacrylate) 9004-34-6D, Cellulose, esters 9004-34-6D, Cellulose, ethers 9011-14-7, Poly(methylmethacrylate) 13978-85-3, Bis(8-hydroxyquinolinato)zinc 14128-73-5 17904-83-5 18130-95-5 24936-74-1 24937-16-4, Nylon 12 24937-78-8, Ethylene-vinylacetate

copolymer 24937-79-9, Poly(vinylidene fluoride) 24979-70-2, Poly(4-vinylphenol) 24980-41-4, Poly(caprolactone) 25013-01-8, Polypyridine 25014-41-9, Poly(acrylonitrile) 25038-74-8 25067-59-8, Poly(vinylcarbazole) 25248-42-4, Poly[oxy(1-oxo-1,6-hexanediyl)] 25322-68-3 26009-24-5, Poly(p-phenylene vinylene) 26098-55-5 30604-81-0, Polypyrrole 32131-17-2, Nylon 6,6, uses 50926-11-9, Indium tin oxide 62555-84-4 94928-86-6 126213-51-2, Poly(3,4-ethylenedioxythiophene) 133019-09-7, Poly(9,9-dihexyl-9H-fluorene-2,7-diyl) 138184-36-8, Poly[2-methoxy-5-(2'-ethylhexyloxy)-1,4-phenylenevinylene] 142289-08-5 144810-07-1 180179-60-6, Poly(methyloctadecylsiloxane) 184378-14-1 188201-14-1 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) 203806-96-6 313262-95-2 322727-85-5 338949-42-1 352546-68-0 474975-19-4 474975-20-7 474975-21-8 474975-22-9 474975-23-0 474975-24-1 474975-25-2 474975-26-3 475095-73-9 475095-75-1 475095-76-2 475095-77-3 475101-36-1 475102-03-5 475102-07-9 475102-09-1 475102-99-9
RL: DEV (Device component use); USES (Uses)
(electroluminescent display fabrication using polymer -encapsulated light-emitting particles)

IT 94928-86-6 188201-14-1 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl)
RL: DEV (Device component use); USES (Uses)
(electroluminescent display fabrication using polymer -encapsulated light-emitting particles)

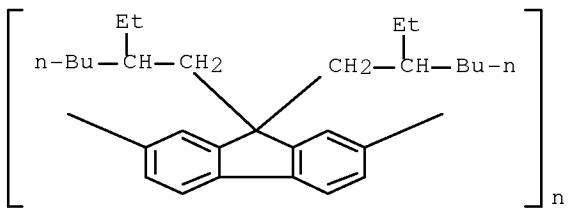
RN 94928-86-6 HCAPLUS

CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



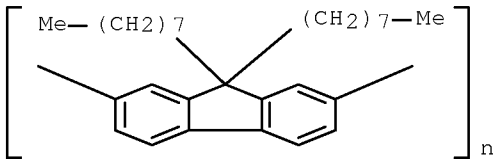
RN 188201-14-1 HCAPLUS

CN Poly[9,9-bis(2-ethylhexyl)-9H-fluorene-2,7-diyl] (CA INDEX NAME)



RN 195456-48-5 HCAPLUS

CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				US 5667724 A	HCAPLUS

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L113 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:827899 HCAPLUS Full-text
DN 137:343707
TI Organic electroluminescent element
IN Tsuge, Hodaka; Komatsuzaki, Akihiro
PA Honda Motor Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002319488	A	20021031	JP 2001-123343	20010420 <--
PRAI JP 2001-123343		20010420 <--		

AB The invention refers to an organic electroluminescent multilayer laminate wherein the organic material comprising the hole block layer is soluble in a solvent which does not solvate the material in the luminescent layer adjacent to the hole block layer.

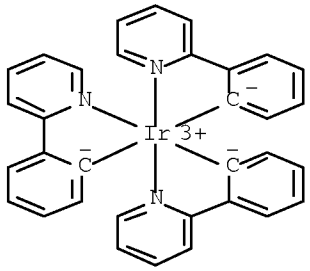
IC ICM H05B0033-10
ICS C09K0011-06; H05B0033-14; H05B0033-22
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescent device solvent lamination
IT Electroluminescent devices
Lamination
Solvents
(organic electroluminescent element)
IT 15082-28-7, PBD 25067-59-8, PVK 94928-86-6 148044-16-0
153838-48-3 337526-85-9 337526-88-2
337526-98-4 343978-77-8 343978-78-9 343978-79-0
343978-94-9 405289-74-9 468732-33-4 468732-34-5
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent element)
IT 56-23-5, Tetrachloromethane, uses 75-05-8, Acetonitrile, uses 75-52-5, Nitromethane, uses 79-01-6, Trichloroethylene, uses 79-24-3, Nitroethane 90-11-9, α-Bromonaphthalene 100-41-4, Ethylbenzene, uses 107-06-2, 1,2-Dichloroethane, uses 110-82-7, Cyclohexane, uses 111-84-2, n-Nonane 540-54-5, 1-Chloropropane 872-05-9, 1-Decene 123864-00-6 137939-26-5 140191-32-8 177838-23-2, Poly(N-dodecyl carbazole) 473916-86-8
RL: TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent element)

IT 94928-86-6 153838-48-3 337526-85-9
337526-88-2 343978-78-9 343978-79-0
405289-74-9 468732-34-5
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent element)

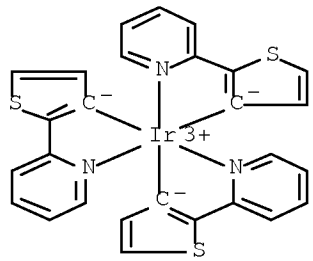
RN 94928-86-6 HCAPLUS

CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



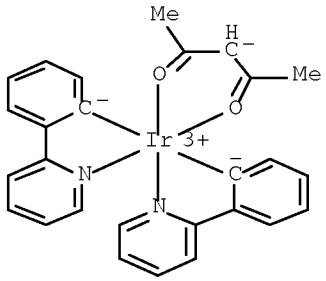
RN 153838-48-3 HCAPLUS

CN Iridium, tris[2-(2-pyridinyl-κN)-3-thienyl-κC]-, (OC-6-22)- (9CI) (CA INDEX NAME)



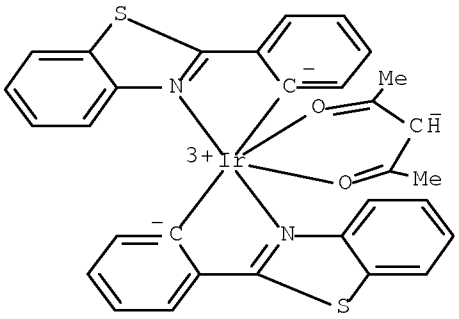
RN 337526-85-9 HCAPLUS

CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-33)- (CA INDEX NAME)



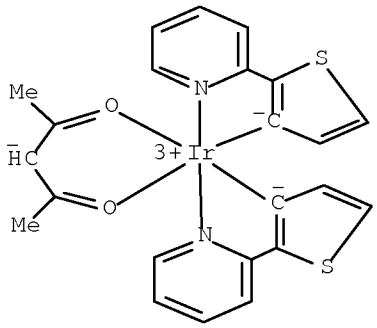
RN 337526-88-2 HCAPLUS

CN Iridium, bis[2-(2-benzothiazolyl-κN3)phenyl-κC](2,4-pentanedionato-κO2,κO4)-, (OC-6-33)- (CA INDEX NAME)



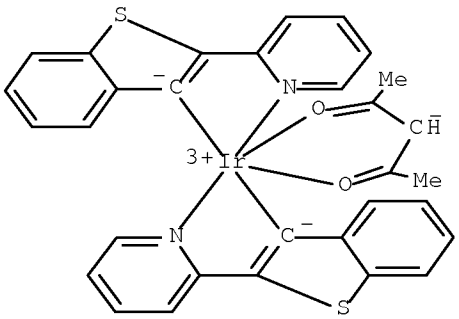
RN 343978-78-9 HCAPLUS

CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)-3-thienyl-κC]-, (OC-6-33)- (CA INDEX NAME)



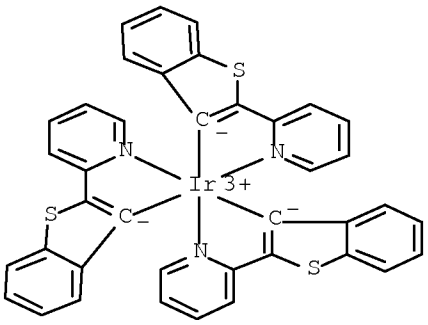
RN 343978-79-0 HCAPLUS

CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]-, (OC-6-33)- (CA INDEX NAME)



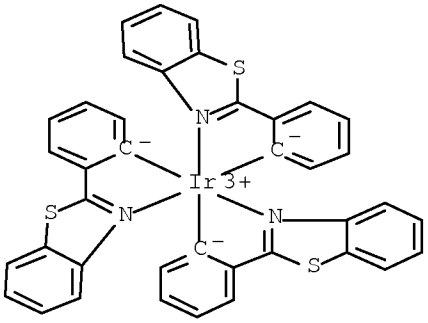
RN 405289-74-9 HCAPLUS

CN Iridium, tris[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]- (CA INDEX NAME)



RN 468732-34-5 HCAPLUS

CN Iridium, tris[2-(2-benzothiazolyl-κN3)phenyl-κC]- (CA INDEX NAME)



IT 123864-00-6

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent element)

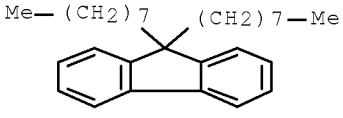
RN 123864-00-6 HCAPLUS

CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 123863-99-0

CMF C29 H42

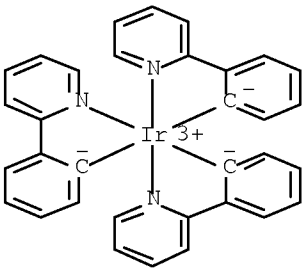


OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L113 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:827898 HCAPLUS Full-text
DN 137:343706
TI Organic electroluminescent laminate production method
IN Tsuge, Hodaka; Komatsusaki, Akihiro
PA Honda Motor Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002319487	A	20021031	JP 2001-123287	20010420 <--
PRAI JP 2001-123287		20010420 <--		

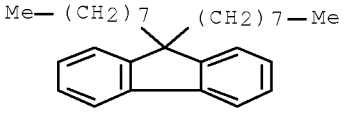
AB The invention refers to a production method of an organic electroluminescent multilayer laminate wherein the luminescent layer is coated onto the anode, and an organic material dissolved in a solvent which does not dissolve the material in the luminescent layer is used to laminate the hole block layer onto the luminescent layer.
IC ICM H05B0033-10
ICS H05B0033-14; H05B0033-22
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescent device solvent lamination
IT Electroluminescent devices
(organic electroluminescent element)
IT Lamination
Solvents
(production method of organic electroluminescent element laminate)
IT 15082-28-7, PBD 25067-59-8, PVK 94928-86-6
123864-00-6 140191-32-8 153838-48-3
337526-85-9 337526-88-2 337526-98-4 343978-77-8
343978-78-9 343978-79-0 343978-94-9
405289-74-9 468732-34-5 473916-86-8
RL: DEV (Device component use); USES (Uses)
(production method of organic electroluminescent element laminate)
IT 56-23-5, Tetrachloromethane, uses 75-05-8, Acetonitrile, uses 75-52-5, Nitromethane, uses 78-87-5, 1,2-DiChloropropane 79-24-3, Nitroethane 90-11-9, α-Bromonaphthalene 100-41-4, Ethylbenzene, uses 107-06-2, 1,2-Dichloroethane, uses 108-38-3, m-Xylene, uses 108-87-2, Methylcyclohexane 110-82-7, Cyclohexane, uses 111-84-2, n-Nonane 137939-26-5 148044-16-0
RL: TEM (Technical or engineered material use); USES (Uses)
(production method of organic electroluminescent element laminate)
IT 468732-33-4
RL: DEV (Device component use); USES (Uses)
(reproduction method of organic electroluminescent element laminate)
IT 94928-86-6 123864-00-6 153838-48-3
337526-85-9 337526-88-2 343978-78-9
343978-79-0 405289-74-9 468732-34-5
RL: DEV (Device component use); USES (Uses)
(production method of organic electroluminescent element laminate)
RN 94928-86-6 HCAPLUS
CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



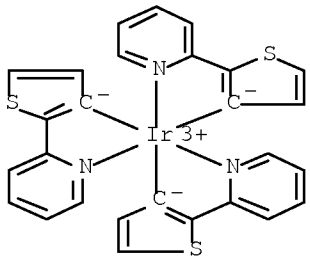
RN 123864-00-6 HCAPLUS
CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

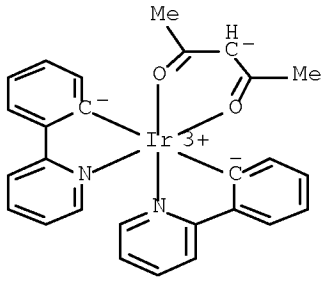
CRN 123863-99-0
CMF C29 H42



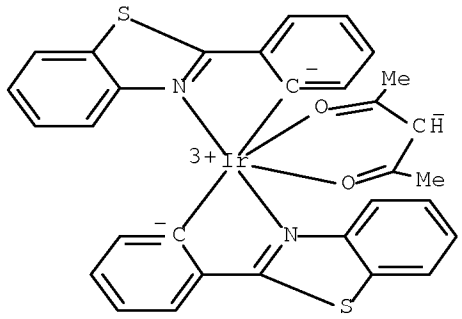
RN 153838-48-3 HCAPLUS
CN Iridium, tris[2-(2-pyridinyl-κN)-3-thienyl-κC]-, (OC-6-22)-
(9CI) (CA INDEX NAME)



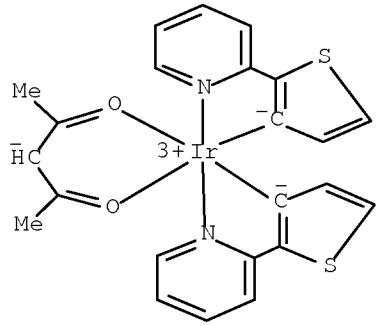
RN 337526-85-9 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-
κN)phenyl-κC]-, (OC-6-33)- (CA INDEX NAME)



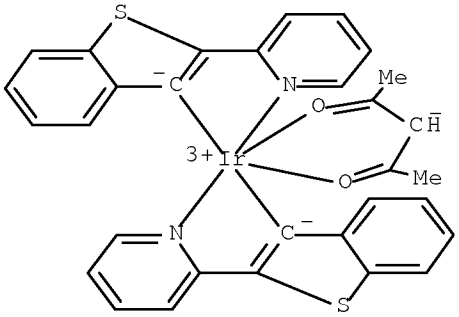
RN 337526-88-2 HCAPLUS
CN Iridium, bis[2-(2-benzothiazolyl-κN3)phenyl-κC](2,4-pentanedionato-κO2,κO4)-, (OC-6-33)- (CA INDEX NAME)



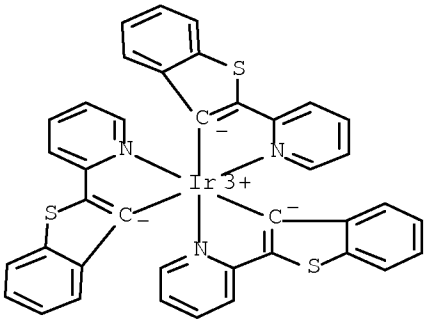
RN 343978-78-9 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)-3-thienyl-κC]-, (OC-6-33)- (CA INDEX NAME)



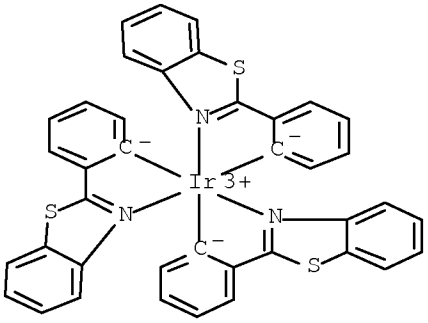
RN 343978-79-0 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]-, (OC-6-33)- (CA INDEX NAME)



RN 405289-74-9 HCAPLUS
CN Iridium, tris[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]- (CA INDEX NAME)

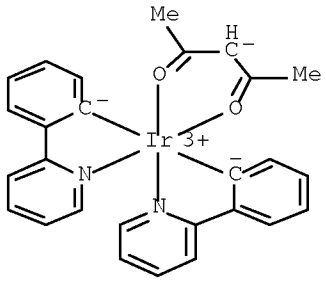


RN 468732-34-5 HCAPLUS
CN Iridium, tris[2-(2-benzothiazolyl-κN3)phenyl-κC]- (CA INDEX NAME)

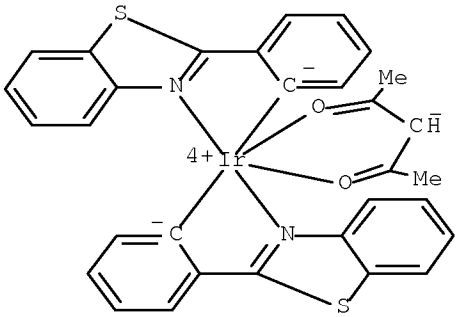


L113 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:626723 HCAPLUS Full-text
DN 137:330812
TI High performance polymer light-emitting diodes

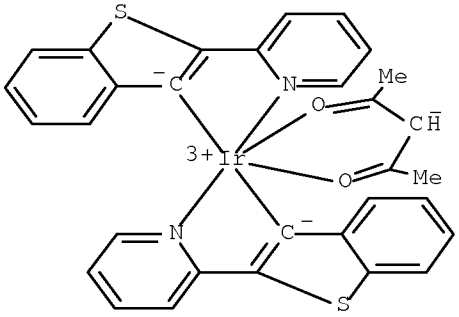
AU Yang, Yang; Chen, Fang-Chung; Thompson, Mark E.
CS Department of Materials Science and Engineering, University of California at Los Angeles, USA
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2002), 43(2), 497-498
CODEN: ACPPAY; ISSN: 0032-3934
PB American Chemical Society, Division of Polymer Chemistry
DT Journal; (computer optical disk)
LA English
AB Backwards excitation energy transfer from the phosphorescent dopants to the semiconducting polymer is investigated. A series of Ir complexes with different triplet energy levels were used as the dopants for phosphorescent polymer LEDs. The triplet energy of these metal complexes can be finely tuned by modifying the chemical structures of ligands. Except for triplet energies, these dopant mols. have similar photophys. properties, such as metal-to-ligand energy transfer absorption energies and transfer excitation lifetime. They provide a suitable system to investigate the influence of dopant excitation energy on the performance of phosphorescent polymer LEDs. The confinement of triplet excitons in important to achieve high efficiency of phosphorescent polymer LEDs.
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST phosphorescent polymer electroluminescent device
triplet exciton energy transfer doping
IT Doping
Electroluminescent devices
Energy transfer
Excited triplet state
Luminescence
Phosphorescence
(high performance polymer light-emitting diodes)
IT Exciton
(triplet; high performance polymer light-emitting diodes)
IT 337526-85-9 337527-04-5 343978-79-0
RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(high performance polymer light-emitting diodes)
IT 123864-00-6
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(high performance polymer light-emitting diodes)
IT 337526-85-9 337527-04-5 343978-79-0
RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(high performance polymer light-emitting diodes)
RN 337526-85-9 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-33)- (CA INDEX NAME)



RN 337527-04-5 HCAPLUS
CN Iridium(1+), bis[2-(2-benzothiazolyl-κN3)phenyl-κC](2,4-pentanedionato-κO,κO')-, (OC-6-33)- (9CI) (CA INDEX NAME)



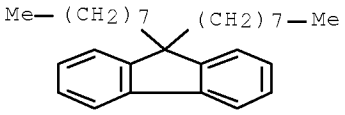
RN 343978-79-0 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]-, (OC-6-33)- (CA INDEX NAME)



IT 123864-00-6
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(high performance polymer light-emitting diodes)
RN 123864-00-6 HCAPLUS
CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 123863-99-0
CMF C29 H42



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adach, C	2000	77	904	Appl Phys Lett	
Adach, C	2001	78	1622	Appl Phys Lett	
Adachi, C	2001	79	2082	Appl Phys Lett	HCAPLUS
Baldo, M	1999	75	4	Appl Phys Lett	HCAPLUS
Baldo, M	1999	74	442	Appl Phys Lett	
Baldo, M	1998	395	151	Nature	HCAPLUS
Chang, S	2001	79	2088	Appl Phys Lett	HCAPLUS
Guo, T	2001	1	15	Org Electronics	
Lamansky, S	2001	123	4304	J Am Chem Soc	HCAPLUS
Lamansky, S	2001	2	53	Org Electronics	HCAPLUS
Lane, P	2001	63	235206	Phys Rev B	
Lee, C	2000	77	2280	Appl Phys Lett	HCAPLUS
O'Brien, D	2001	116	379	Synth Met	HCAPLUS
Rothe, C	2002	65	073201	Phys Rev B	

L113 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:540102 HCAPLUS Full-text
DN 137:101238
TI Luminescent device and method of manufacturing same
IN Seo, Satoshi; Yamazaki, Shunpei
PA Japan
SO U.S. Pat. Appl. Publ., 35 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

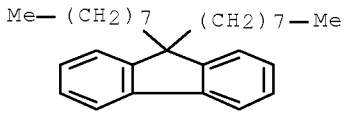
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20020093283	A1	20020718	US 2002-43786	20020110 <--
	TW 518909	B	20030121	TW 2001-90132586	20011227 <--
	SG 102026	A1	20040227	SG 2002-37	20020104 <--
	CN 1366354	A	20020828	CN 2002-101695	20020117 <--
	CN 1269231	C	20060809		
	JP 2002289352	A	20021004	JP 2002-9296	20020117 <--
	JP 3986829	B2	20071003		
	CN 1881564	A	20061220	CN 2006-10091522	20020117 <--
	US 20050170737	A1	20050804	US 2005-69235	20050302 <--
	US 7550173	B2	20090623		
	JP 2005235783	A	20050902	JP 2005-110754	20050407 <--
	JP 4198695	B2	20081217		
PRAI	JP 2001-9544	A	20010117	<--	
	US 2002-43786	A3	20020110	<--	
	CN 2002-101695	A3	20020117	<--	
	JP 2002-9296	A3	20020117	<--	

AB Luminescent devices are described which comprise an organic luminescent element comprising: an anode; a cathode; and an organic compound layer interposed between the anode and the cathode, comprising ≥2 compds. selected from the group of a hole injection compound which receives holes from the anode, an electron injection compound which receives electrons from the cathode, a hole transport compound, an electron transport compound, a blocking compound and a luminescent compound which demonstrates light emission, wherein one of the two compds. is at least a high-mol. weight compound, and wherein a mixed region in which the two compds. are mixed is located apart from the anode and the cathode. Methods of fabricating the devices in which the organic compds. are deposited from solns. are also described.

IC ICM H05B0033-14
INCL 313504000
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 76
ST org electroluminescent device mixed org layer fabrication
IT Semiconductor device fabrication
(organic electroluminescent devices with mixed organic layers and their fabrication)
IT Electroluminescent devices
(organic; organic electroluminescent devices with mixed organic layers and their fabrication)
IT 26009-24-5, Poly(1,4-phenylene-1,2-ethenediyl) 26009-24-5D, Poly(1,4-phenylene-1,2-ethenediyl), derivs. 123864-00-6
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); PROC (Process); USES (Uses)
(organic electroluminescent devices with mixed organic layers and their fabrication)
IT 2085-33-8, Tris(8-hydroxyquinolinato)aluminum 7429-90-5, Aluminum, uses 7440-06-4D, Platinum, compds. 7440-41-7D, Beryllium., compds. 7440-64-4, Ytterbium, uses 7440-66-6D, Zinc, compds. 7440-70-2, Calcium, uses 25067-59-8, Polyvinylcarbazole 50926-11-9, Indium tin oxide 124729-98-2, 4,4',4''-Tris[N-(3-methylphenyl)-N-phenylamino]triphenylamine 337526-85-9
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(organic electroluminescent devices with mixed organic layers and their fabrication)
IT 50851-57-5
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); PROC (Process); USES (Uses)
(polyethylene dioxythiophene doped with; organic electroluminescent devices with mixed organic layers and their fabrication)
IT 126213-51-2, Poly(3,4-ethylenedioxythiophene)
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); PROC (Process); USES (Uses)
(polystyrene sulfonate-doped; organic electroluminescent devices with mixed organic layers and their fabrication)
IT 123864-00-6
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); PROC (Process); USES (Uses)
(organic electroluminescent devices with mixed organic layers and their fabrication)
RN 123864-00-6 HCAPLUS
CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

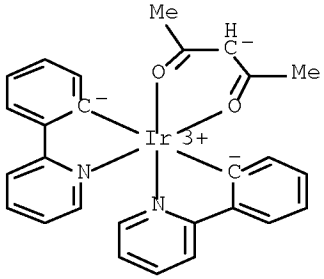
CRN 123863-99-0
CMF C29 H42



IT 7440-06-4D, Platinum, compds. 337526-85-9
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(organic electroluminescent devices with mixed organic layers and their fabrication)
RN 7440-06-4 HCAPLUS
CN Platinum (CA INDEX NAME)

Pt

RN 337526-85-9 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-33)- (CA INDEX NAME)



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L113 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:290668 HCAPLUS Full-text
DN 136:316680
TI Luminescent ink for printing of organic luminescent devices
IN Li, Xiao-Chang Charles
PA Canon Kabushiki Kaisha, Japan
SO U.S., 13 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6372154	B1	20020416	US 1999-476396	19991230 <--
PRAI US 1999-476396		19991230 <--		

AB Organic luminescent ink (L-ink) is disclosed for use in printing thin films of organic luminescent material. The L-ink is particularly useful in fabricating organic optoelectronic devices, e.g. organic luminescent devices. The L-ink

contains ≥1 organic luminescent material mixed with a solvent and other functional additives to provide the necessary optical, electronic and morphol. properties for light-emitting devices (LEDs). The additives play an important role either for enhanced thin film printing or for better performance of the optoelectronic device. The functional additives may be chemical bound to the luminescent compds. or polymers. Luminescent organic compds., oligomers, or polymers with relatively low solution viscosity, good thin film formability, and good charge transporting properties, are preferred. The L-inks can be cross-linked under certain conditions to enhance thin film properties. The L-ink can be used in various printing methods, such as screen printing, stamp printing, and preferably ink-jet printing (including bubble-jet printing).

IC ICM H01L0051-40
ICS C09K0011-06
INCL 252301160
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 35, 36, 74
ST luminescent ink printing org electroluminescent device
IT Amines, uses
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(aromatic; luminescent ink for printing of organic luminescent devices)
IT Optical imaging devices
(flat panel displays; luminescent ink for printing of organic luminescent devices)
IT Crosslinking agents
Electrochromic imaging devices
Electroluminescent devices
Ink-jet printing
Inks
Multilayers
Phosphors
Photoelectric devices
Screen printing
Solar cells
Thin film transistors
(luminescent ink for printing of organic luminescent devices)
IT Porphyrins
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)
IT Polyoxyalkylenes, uses
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)
IT 147-14-8, Copper phthalocyanine 2085-33-8, Alq3
RL: CPS (Chemical process); DEV (Device component use); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)
IT 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl)
412045-84-2
RL: CPS (Chemical process); DEV (Device component use); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); POF

(Polymer in formulation); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)

IT 81-88-9, Rhodamine B
RL: CPS (Chemical process); MOA (Modifier or additive use); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)

IT 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-63-0, Isopropanol, uses 67-66-3, Chloroform, uses 86-74-8, Carbazole 95-50-1, 1,2-Dichlorobenzene 107-06-2, 1,2-Dichloroethane, uses 108-88-3, Toluene, uses 109-99-9, Tetrahydrofuran, uses 110-02-1, Thiophene 110-86-1, Pyridine, uses 120-12-7, Anthracene, uses 123-91-1, Dioxane, uses 517-51-1, Rubrene 852-38-0, PBD 872-50-4, N-Methyl-2-pyrrolidone, uses 1330-20-7, Xylene, uses 1450-63-1, 1,1,4,4-Tetraphenyl-1,3-butadiene 1608-30-6 25321-22-6, Dichlorobenzene 31248-39-2 35296-72-1, Butanol 38215-36-0, 3-(2-Benzothiazolyl)-7-(diethylamino)coumarin 58328-31-7 65181-78-4, TPD 94928-86-6, Tris(2-phenylpyridine) iridium
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)

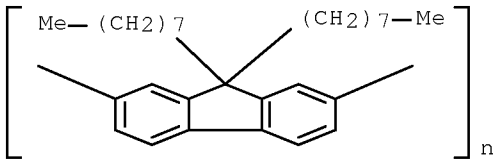
IT 9033-83-4D, Poly (phenylene), derivs. 25067-59-8, Poly(N-vinylcarbazole) 25233-34-5, Polythiophene 25322-68-3, Polyethylene glycol 95270-88-5, Polyfluorene 96638-49-2, Poly(phenylene vinylene)
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)

IT 138184-36-8, MEH-PPV
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(luminescent polymer; luminescent ink for printing of organic luminescent devices)

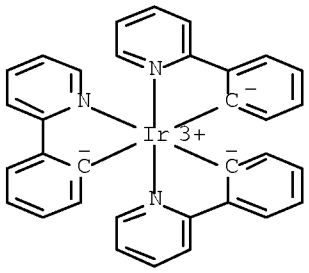
IT 7732-18-5, Water, uses
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(solvent; luminescent ink for printing of organic luminescent devices)

IT 195456-48-5, Poly(9,9-dioctyl-9H-fluorene-2,7-diyl)
RL: CPS (Chemical process); DEV (Device component use); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)

RN 195456-48-5 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl) (CA INDEX NAME)



IT 94928-86-6, Tris(2-phenylpyridine) iridium
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(luminescent ink for printing of organic luminescent devices)
RN 94928-86-6 HCAPLUS
CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Baldo, M	1999		4	Very High-Efficiency	HCAPLUS
Cao	1999			US 5965281 A	HCAPLUS
Cao, Y	1998	10	917	Adv Mater	HCAPLUS
Chang	1999	11	734	Adv Mater	HCAPLUS
Garnier, F	1994	265	1684	Science	
O'Brien, D	1999	74	442	Applied Physics Lett	HCAPLUS
Pei	1997			US 5682043 A	HCAPLUS
Shun-Chi Chang, C	1998	73	253	Appl Phys Lett	
Sturm	2000			US 6087196 A	HCAPLUS
Tang, C		51	913	Appl Phys Lett	HCAPLUS
Thompson	2000			US 6013982 A	HCAPLUS
Wachtel	1980			US 4186020 A	HCAPLUS
Xiao-Chang, L	1995		2211	J Chem, Soc, Chem Co	
Zabiak	1979			US 4153593 A	HCAPLUS

OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)

L113 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:243794 HCAPLUS Full-text
DN 137:85571
TI High-performance polymer light-emitting diodes doped with a red phosphorescent iridium complex
AU Chen, Fang-Chung; Yang, Yang; Thompson, Mark E.; Kido, Junji
CS Department of Materials Science and Engineering, University of California at Los Angeles, Los Angeles, CA, 90095, USA

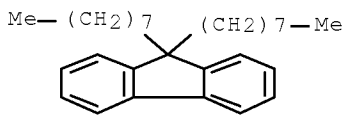
SO Applied Physics Letters (2002), 80(13), 2308-2310
CODEN: APPLAB; ISSN: 0003-6951
PB American Institute of Physics
DT Journal
LA English

AB High efficiency was achieved in polymer LEDs (PLEDs) exhibiting red emission by doping a fluorescence host material, poly(vinylcarbazole) (PVK), with an Ir(III) complex, bis[2-(2'-benzothienyl)-pyridinato-N,C3']iridium(acetylacetonate) (BtpIr). The electroluminescence has a maximum λ = 614 nm. The highest external quantum efficiency is 3.3%. Due to its short triplet excited lifetime (.apprx.5 μs), the quenching of the triplet exciton in BtpIr-doped PVK PLEDs is suppressed compared to Pt(II)-2,8,12,17-tetraethyl-3,7,13,18-tetramethylporphyrin- doped PVK PLEDs. 65% Of the peak efficiency can be sustained at high-c.d. and at the high brightness of 1350 cd/m2. Probably both triplet-triplet annihilation and polaron-triplet annihilation involves exciton quenching.

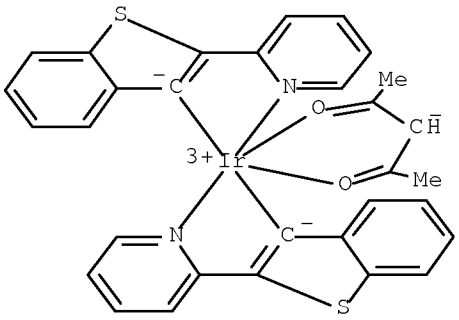
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 76
ST polymer light emitting diode doped red phosphorescent iridium complex
IT Electroluminescent devices
(high-performance polymer LEDs doped with red phosphorescent iridium complex)
IT Luminescence, electroluminescence
(of high-performance polymer LEDs doped with red phosphorescent iridium complex)
IT Exciton
(triplet; of high-performance polymer LEDs doped with red phosphorescent iridium complex)
IT 25067-59-8, Poly(vinylcarbazole) 123864-00-6
RL: DEV (Device component use); USES (Uses)
(high-performance LEDs doped with red phosphorescent iridium complex)
IT 343978-79-0
RL: PRP (Properties)
(high-performance polymer LEDs doped with red phosphorescent)
IT 15082-28-7, ButylPBD 126213-51-2, PEDOT
RL: DEV (Device component use); USES (Uses)
(high-performance polymer LEDs doped with red phosphorescent iridium complex and)
IT 123864-00-6
RL: DEV (Device component use); USES (Uses)
(high-performance LEDs doped with red phosphorescent iridium complex)
RN 123864-00-6 HCAPLUS
CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 123863-99-0
CMF C29 H42



IT 343978-79-0
RL: PRP (Properties)
(high-performance polymer LEDs doped with red phosphorescent)
RN 343978-79-0 HCAPLUS
CN Iridium, (2,4-pentanedionato-κO2,κO4)bis[2-(2-pyridinyl-κN)benzo[b]thien-3-yl-κC]-, (OC-6-33)- (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adachi, C	2000	77	904	Appl Phys Lett	HCAPLUS
Adachi, C	2001	78	1622	Appl Phys Lett	HCAPLUS
Adachi, C	2000	87	8049	J Appl Phys	HCAPLUS
Baldo, M	1999	75	4	Appl Phys Lett	HCAPLUS
Baldo, M	1999	60	14422	Phys Rev B	HCAPLUS
Baldo, M	2000	62	10967	Phys Rev B	HCAPLUS
Chang, S	2001	79	2088	Appl Phys Lett	HCAPLUS
Chang, S				unpublished	
Friend, R	1999	397	121	Nature (London)	HCAPLUS
Guo, T	2001	1	15	Org Electron	
Ikai, M	2001	79	156	Appl Phys Lett	HCAPLUS
Itaya, A	1988	146	570	Chem Phys Lett	HCAPLUS
Kido, J	1994	65	2124	Appl Phys Lett	HCAPLUS
Lamansky, S	2001	123	4304	J Am Chem Soc	HCAPLUS
Lamansky, S	2001	2	53	Org Electron	HCAPLUS
Lane, P	2001	63	235206	Phys Rev B	
O'Brien, D	2001	116	379	Synth Met	HCAPLUS
Shoustikov, A	1998	4	3	IEEE J Sel Top Quant	HCAPLUS

OSC.G 132 THERE ARE 132 CAPLUS RECORDS THAT CITE THIS RECORD (134 CITINGS)

L113 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:227363 HCAPLUS Full-text
DN 137:69875
TI Highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes
AU Zhu, Weiguo; Mo, Yueqi; Yuan, Min; Yang, Wei; Cao, Yong
CS Institute of Polymer Optoelectronic Material and Devices, South China University of Technology, Canton, 510640, Peop. Rep. China
SO Applied Physics Letters (2002), 80(12), 2045-2047
CODEN: APPLAB; ISSN: 0003-6951
PB American Institute of Physics
DT Journal
LA English

AB Iridium complexes with alkyl substituted 2-phenylpyridine, Ir(Bu-PPy)3, were synthesized. Polymer light emitting diodes with Ir complexes as the guest materials and the substituted polyphenylenes as the host were fabricated. Ir(Bu-PPy)3-doped Poly(2-(6-cyano-6-methyl)-heptyloxy-1,4-phenylene) (CNPPP) device showed generally higher quantum efficiency (QE) than that of Ir(PPy)3-doped device for a given dopant concentration More importantly, the addition of Bu group into phenylpyridine ligand significantly suppresses the decay of device efficiency at high c.d. For instance, for devices made with Ir(Bu-PPy)3-doped CNPPP: the maximum external quantum efficiency, QE, and luminance efficiency reached 5.1% ph/el and 12 cd/A, resp., at 800 cd/m2 and maintained at 4.2% ph/el and 10 cd/A, resp., at 2500 cd/m2.

CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 76, 78

ST electrophosphorescent device iridium phenylpyridine butyl complex conjugated polymer

IT Polymers, properties
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(conjugated; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

IT Doping
(effect of doping concentration; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

IT Phosphorescent substances
(electro-; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

IT Electroluminescent devices
Luminescence, electroluminescence
(highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

IT Luminescence
(of tris(2-phenylpyridine)iridium-doped CNPPP films)

IT Substituent effects
(t-Bu; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

IT 94928-86-6, Tris(2-phenylpyridine)iridium 359014-76-9
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
(film, polymer doped with; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

IT 25067-59-8, 9H-Carbazole, 9-ethenyl-, homopolymer
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(hole-injection layer, host material; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

IT 184378-14-1, Poly[[(6-cyano-6-methylheptyl)oxy]-1,4-phenylene] 439675-33-9
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
(iridium complex-doped host material; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

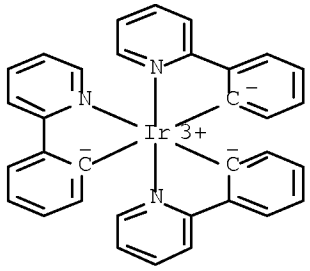
IT 123863-98-9, Poly(9,9;-dihexylfluorene)
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(iridium complex-doped host material; highly efficient electrophosphorescent devices based on conjugated polymers

doped with iridium complexes)

IT 94928-86-6, Tris(2-phenylpyridine)iridium 359014-76-9
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
(film, polymer doped with; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

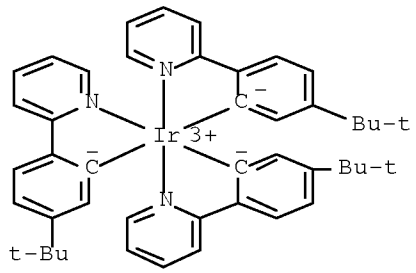
RN 94928-86-6 HCAPLUS

CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



RN 359014-76-9 HCAPLUS

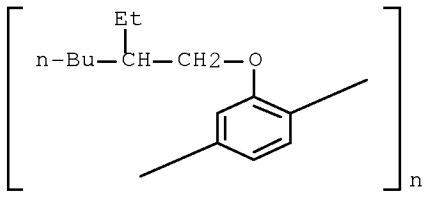
CN Iridium, tris[5-(1,1-dimethylethyl)-2-(2-pyridinyl-κN)phenyl-κC]- (CA INDEX NAME)



IT 439675-33-9
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
(iridium complex-doped host material; highly efficient electrophosphorescent devices based on conjugated polymers doped with iridium complexes)

RN 439675-33-9 HCAPLUS

CN Poly[2-[(2-ethylhexyl)oxy]-1,4-phenylene] (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adachi, C	2000	77	904	Appl Phys Lett	HCAPLUS
Baldo, M	1999	75	4	Appl Phys Lett	HCAPLUS
Baldo, M	1998	395	151	Nature (London)	HCAPLUS
Baldo, M	2000	403	750	Nature (London)	HCAPLUS
Cao, Y	2000	88	3618	J Appl Phys	HCAPLUS
Guo, T	2000	1	15	Organic Electronics	HCAPLUS
Kido, J	1994	65	2124	Appl Phys Lett	HCAPLUS
Lee, C	2000	77	2280	Appl Phys Lett	HCAPLUS
Ma, Y	1998	94	245	Synth Met	HCAPLUS
McGehee, M	1999	11	1349	Adv Mater	HCAPLUS
O'Brien, D	1999	74	442	Appl Phys Lett	HCAPLUS
O'Brien, D	2001	116	379	Synth Met	HCAPLUS
Watanabe, T	2001	122	203	Synth Met	HCAPLUS
Wittmann, H	1994	101	2693	J Chem Phys	HCAPLUS
Yang, Y	1996	79	934	J Appl Phys	HCAPLUS
Zhang, Y	1991	30	1685	Inorg Chem	

OSC.G 110 THERE ARE 110 CAPLUS RECORDS THAT CITE THIS RECORD (110 CITINGS)

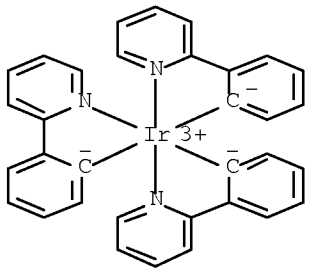
L113 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:119732 HCAPLUS Full-text
DN 136:191469
TI Organic electroluminescent component
IN Hirai, Hiroyuki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002050482	A	20020215	JP 2000-237154	20000804 <--
PRAI	JP 2000-237154		20000804 <--		

AB The invention refers to an electroluminescent component, suitable for use in full color displays, back-lit planar light sources, and light source arrays, wherein the organic luminescent layer contains a orthometal complex first layer, and a second layer comprising polymeric luminescent material, wherein preferable applications use an Ir complex, the orthometal complex comprises 1 - 20% of the luminescent layer, the first luminescent layer contains a host compound, the spectra of the two luminescent layers are different and the layers are formed by a wet method, in order to produce a device with multiple luminescence, high efficiency and brightness low power consumption and a simple production process.

IC ICM H05B0033-14
ICS C09K0011-06; H05B0033-10; H05B0033-12

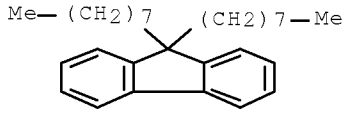
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST electroluminescent device iridium orthometal complex
IT Electroluminescent devices
Optical imaging devices
(organic electroluminescent component)
IT 15082-28-7, 2-(4-Biphenyl)-5-(4-tert-butylphenyl)-1,3,4-oxadiazole 25067-59-8, Poly(N-vinylcarbazole) 26009-24-5D, PPV 02, derivs. 94928-86-6, Tris(2-phenylpyridine) iridium 123864-00-6, Poly(9,9-dioctylfluorene) 153838-48-3 337526-86-0 337526-98-4 397313-78-9
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent component)
IT 94928-86-6, Tris(2-phenylpyridine) iridium 123864-00-6, Poly(9,9-dioctylfluorene) 153838-48-3 337526-86-0
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent component)
RN 94928-86-6 HCAPLUS
CN Iridium, tris[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-22)- (CA INDEX NAME)



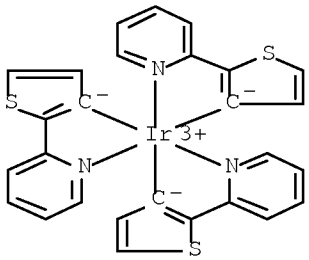
RN 123864-00-6 HCAPLUS
CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

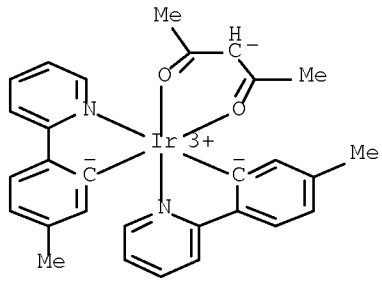
CRN 123863-99-0
CMF C29 H42



RN 153838-48-3 HCAPLUS
CN Iridium, tris[2-(2-pyridinyl-κN)-3-thienyl-κC]-, (OC-6-22)- (9CI) (CA INDEX NAME)



RN 337526-86-0 HCAPLUS
CN Iridium, bis[5-methyl-2-(2-pyridinyl-κN)phenyl-κC](2,4-pentanedionato-κO2,κO4)-, (OC-6-33)- (CA INDEX NAME)



L113 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2001:5 HCAPLUS Full-text
DN 134:49000
TI Organic opto-electronic device
IN Burroughes, Jeremy Henley; Devine, Peter
PA Cambridge Display Technology Limited, UK
SO Brit. UK Pat. Appl., 18 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2348316	A	20000927	GB 1999-7118	19990326 <--
PRAI GB 1999-7118		19990326 <--		

AB Optoelectronic devices (e.g., devices for emitting or detecting light) comprising an anode; a light-transmissive cathode; and an organic active region are described in which the cathode includes a conductive layer and a spacing layer comprising an elec. nonconductive material, the spacing layer being located between the elec. conductive layer and the active region and being sufficiently thin to allow charge to flow through it between the elec. conductive layer and the active region. Methods for fabricating the devices are described which entail depositing an anode electrode; depositing over the anode electrode a region of an active material; depositing over the region of active material an elec. nonconductive material 0.5-20 nm thick to form a first cathode layer; and depositing over the first cathode layer an elec. conductive layer to form a second cathode layer.
IC ICM H01L0051-20

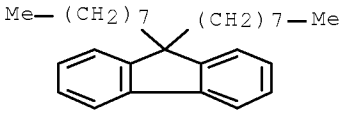
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 76
IT Cathodes
Electric contacts
Electroluminescent devices
Optical detectors
Optoelectronic semiconductor devices
Semiconductor device fabrication
(organic optoelectronic devices with multilayer cathode structures)
IT 7429-90-5, Aluminum, uses 7440-06-4, Platinum, uses 7440-22-4, Silver, uses 7440-50-8, Copper, uses 13400-13-0, Cesium fluoride 50926-11-9, Indium tin oxide 123864-00-6 210347-52-7 220797-16-0
RL: DEV (Device component use); USES (Uses)
(organic optoelectronic devices with multilayer cathode structures)
IT 7440-06-4, Platinum, uses 123864-00-6
RL: DEV (Device component use); USES (Uses)
(organic optoelectronic devices with multilayer cathode structures)
RN 7440-06-4 HCAPLUS
CN Platinum (CA INDEX NAME)

Pt

RN 123864-00-6 HCAPLUS
CN 9H-Fluorene, 9,9-dioctyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 123863-99-0
CMF C29 H42



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

=> => d bib abs hitstr tot

L120 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2008:202440 HCAPLUS Full-text
DN 148:390325
TI First Iridium Complex End-Capped Polyfluorene: Improving Device Performance for Phosphorescent Polymer Light-Emitting Diodes
AU Zhang, Kai; Chen, Zhao; Yang, Chuluo; Zou, Yang; Gong, Shaolong; Qin, Jingui; Cao, Yong
CS Department of Chemistry, Hubei Key Lab on Organic and Polymeric Optoelectronic Materials, Wuhan University, Wuhan, 430072, Peop. Rep. China
SO Journal of Physical Chemistry C (2008), 112(10), 3907-3913

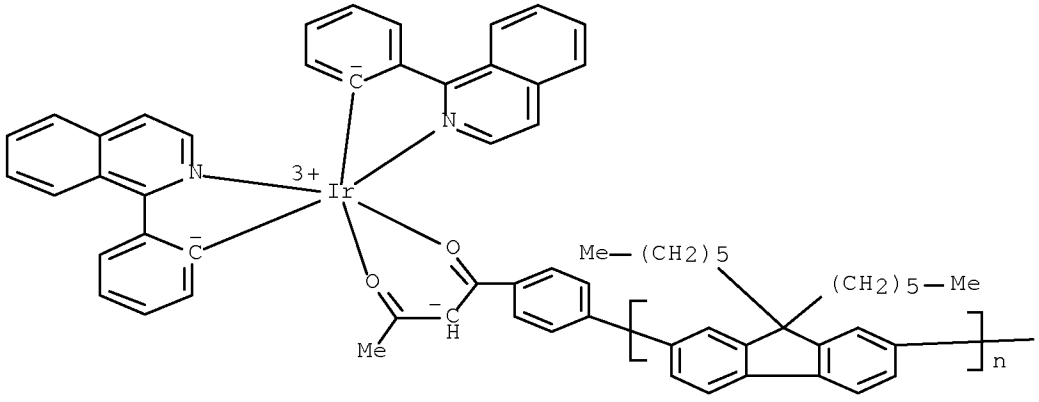
CODEN: JPCCCK; ISSN: 1932-7447
PB American Chemical Society
DT Journal
LA English

AB Two types of fluorene-based copolymers, with 1-phenylisoquinoline-Ir complexes incorporated into the polyfluorene main chain by either embedding (P1 and P2) or end-capping (P3) manners via ancillary ligand β-diketonate were synthesized by the Suzuki polycondensation reaction and characterized by 1H NMR, 13C NMR, elemental anal., and GPC. The electrochem. study reveals that the HOMO and LUMO energy levels of the monomeric Ir complexes fall within those of the parent polyfluorene, implying that the Ir complexes in the polymers could function as traps for both electrons and holes under elec. excitation. The different connection manners between the Ir complex and polyfluorene backbone have a significant effect on their photophys. and electroluminescent properties. The absorption spectra of P1-P3 are mostly characteristic of the polyfluorene backbone. The PL spectra of P1 and P2 are dominated by emission from the Ir complex at 625 nm, whereas for P3 the emission at 425 nm from the polyfluorene backbone is more intense than the emission at 622 nm from the Ir complex. The PL decay measurements show that P3 has a longer triplet lifetime at 1.05 μs with monoexponential mode than those of P1 and P2 with biexponential mode. Polymer light-emitting diodes with the configuration of ITO/PEDOT/PVK/ P1, P2, or P3/Ba/Al were fabricated. The EL spectra of all of the devices show exclusively phosphorescent emission at 626-633 nm dominated by the charge-trapping mechanism. The device using P3 as the emitting layer displays significantly higher efficiency than those based on P1 and P2, which is attributed mainly to the fact that P3 suffers much less from triplet exciton back-transfer from the Ir complex to the polyfluorene backbone than P1 and P2. A red-emitting polymer light-emitting diode with an emission peak at 633 nm, a maximum external quantum efficiency of 1.70% at a c.d. (J) of 3.58 mA/cm2, and a maximum luminance of 706 cd/m2 at 18 V was achieved.

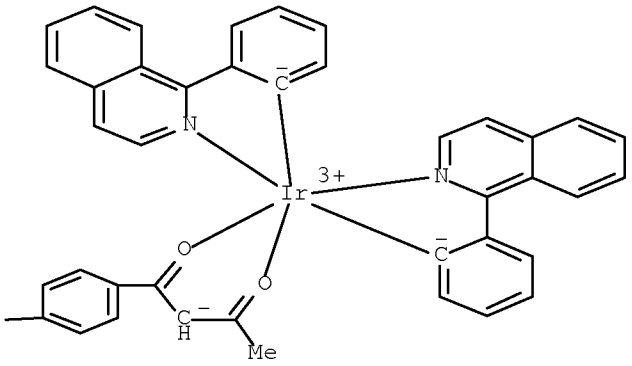
IT 1013633-39-0P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(first iridium complex end-capped polyfluorene: improving device performance for phosphorescent polymer light-emitting diodes)

RN 1013633-39-0 HCAPLUS
CN Poly(9,9-dihexyl-9H-fluorene-2,7-diyl), α,ω-bis[4-[1,3-di(oxo-κO)butyl]phenyl]-, complex with bis[2-(1-isoquinolinyl-κN)phenyl-κC]iridium (1:2) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

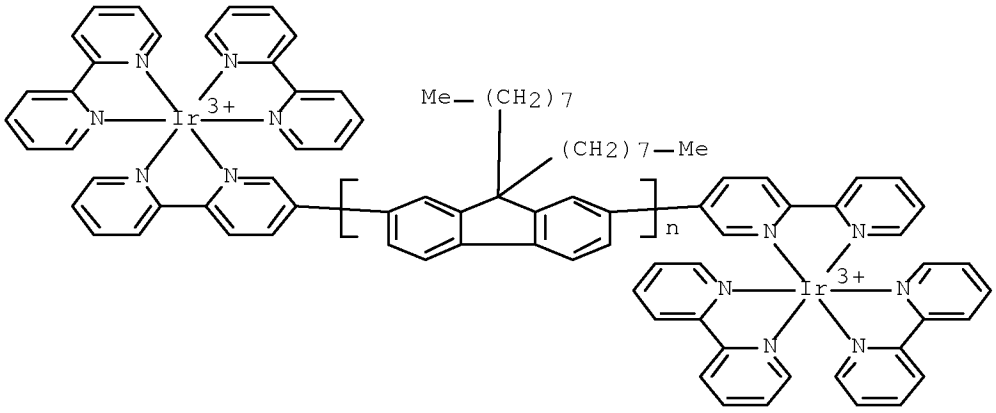
L120 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:705885 HCAPLUS Full-text
DN 147:119025
TI Electroluminescent polyfluorene end-capped with phosphorescent organometallic complex, light-emitting element and light-emitting device
IN Hsu, Steve Lien-Chung; Lee, Po-I.
PA National Cheng Kung University Chi Mei Optoelectronics Corp., Taiwan
SO U.S. Pat. Appl. Publ., 12pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070148491	A1	20070628	US 2005-313938	20051222
	CN 1995271	A	20070711	CN 2006-10156214	20061221
PRAI	US 2005-313938	A	20051222		

AB An electroluminescent material comprises a conjugated polymer endcapped with two phosphorescent organometallic complexes, i.e. Re-complex, Ru-complex, or Ir-complex. A 3-bromopyridine end-capped polyfluorene (intermediate) is reacted with 2,2-bipyridyl(tricarbonyl)rhenium(I) chloride. The polyfluorene has controlled mol. weight and incorporates phosphorescent metal complexes without the phase separation problem between the metal and polymer.
IT 942627-79-4P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electroluminescent conjugated polymer end-capped with phosphorescent organometallic complex of controlled mol. weight and no phase separation for LED)
RN 942627-79-4 HCAPLUS
CN Poly(9,9-dioctyl-9H-fluorene-2,7-diyl),
α,ω-bis([2,2'-bipyridin]-5-yl-κN1,κN1')-,
bis[bis(2,2'-bipyridine-κN1,κN1)iridium(3+)] complex,
perchlorate (1:6) (CA INDEX NAME)

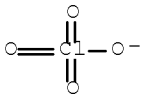
CM 1

CRN 942627-78-3
CMF (C29 H40)n C60 H46 Ir2 N12
CCI CCS, PMS



CM 2

CRN 14797-73-0
CMF Cl O4



=> => d bib abs hitstr tot

L130 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2008:250377 HCAPLUS Full-text
DN 148:427324
TI Iridium-functionalized polyfluorenes: advantages and limitations of the Suzuki and Yamamoto approaches
AU Langecker, Jens; Rehahn, Matthias
CS Ernst-Berl-Institute for Chemical Engineering and Macro-Molecular Science, Darmstadt University of Technology, Darmstadt, D-64287, Germany
SO Macromolecular Chemistry and Physics (2008), 209(3), 258-271
CODEN: MCHPES; ISSN: 1022-1352
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
AB Four synthetic pathways leading toward iridium-functionalized polyfluorenes are compared: the metallopolymers were synthesized via Suzuki and Yamamoto polycondensation reactions, and precursor routes and direct routes were tested for both coupling protocols. The direct Yamamoto synthesis, an appropriately

functionalized iridium-complex as comonomer, is the most efficient method. The three competing routes produce the desired polymers too, but the materials are either lower in mol. weight or less regular in mol. structure. Exploratory anal. of the optical properties shows that the polyfluorene moieties dominate absorption and photoluminescence in dilute solution, while luminescence originates mainly from the iridium complexes in the solid-state.

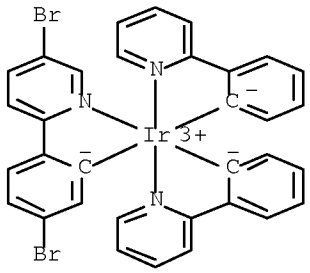
IT 1017835-77-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (comparison of Suzuki and Yamamoto coupling polymerization routes in preparation of iridium complex containing photoluminescent polyfluorenes)

RN 1017835-77-6 HCAPLUS

CN Iridium, [5-bromo-2-(5-bromo-2-pyridinyl-κN)phenyl-κC]bis[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-43)-, polymer with 2,7-dibromo-9,9-bis(2-ethylhexyl)-9H-fluorene (CA INDEX NAME)

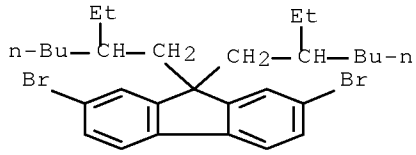
CM 1

CRN 1030852-54-0
CMF C33 H22 Br2 Ir N3
CCI CCS



CM 2

CRN 188200-93-3
CMF C29 H40 Br2



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L130 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2008:113146 HCAPLUS Full-text
DN 148:356188
TI Pure white-light-emitting diodes from phosphorescent single polymer systems
AU Lee, Po-I.; Hsu, Steve Lien-Chung; Lee, Jung-Feng

CS Department of Materials Science and Engineering, Frontier Material and Micro/Nano Science and Technology Center, National Cheng-Kung University, Tainan, 701-01, Taiwan

SO Journal of Polymer Science, Part A: Polymer Chemistry (2007), Volume Date 2008, 46(2), 464-472
CODEN: JPACEC; ISSN: 0887-624X
PB John Wiley & Sons, Inc.
DT Journal
LA English

AB White light-emitting diodes from phosphorescent single polymer systems were developed using a blue-light-emitting fluorene monomer copolymd. with a red-light-emitting phosphorescent dye, and end-capped with a green-light-emission dye. All of the copolymers have good thermal stability with 5% weight loss temperature 380-413° and glass transition temperature of 75-137°. White-light-emission devices were fabricated by adjusting the molar ratio of comonomers with a structure of indium tin oxide/poly(3,4-ethylenedioxythiophene):poly(styrene sulfonic acid)/polyvinylcarbazole (PVK)/emission layer/Ca/Ag. The highest brightness of the device configuration was 300 cd/m2 at a c.d. of 2900 A/m2 with high white color quality (Commission Internationale de l'Eclairage (CIE) coordinates of (0.33, 0.34)).

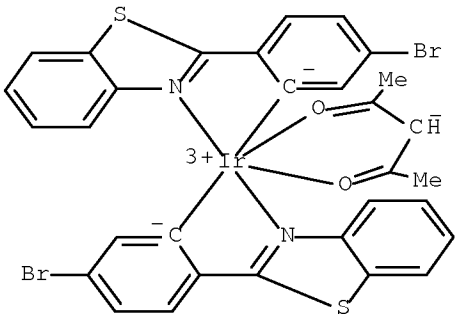
IT 1009641-99-9P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of iridium bromophenylbenzothiazole-fluorene phosphorescent copolymer and performance in white-light-emitting diodes)

RN 1009641-99-9 HCAPLUS

CN Iridium, bis[2-(2-benzothiazolyl-κN3)-5-bromophenyl-κC](2,4-pentanedionato-κO2,κO4)-, polymer with 2,7-dibromo-9,9-dioctyl-9H-fluorene (CA INDEX NAME)

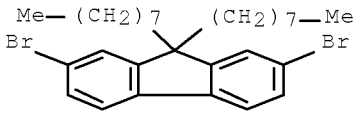
CM 1

CRN 913266-99-6
CMF C31 H21 Br2 Ir N2 O2 S2
CCI CCS



CM 2

CRN 198964-46-4
CMF C29 H40 Br2

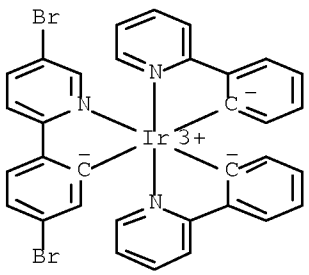


OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L130 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:847519 HCAPLUS Full-text
DN 149:65778
TI Polyfluorene-based iridium complex polymers for organic light-emitting diodes
AU Langecker, Jens; Rehahn, Matthias
CS Ernst-Berl-Institute for Chemical Engineering and Macromolecular Science, Darmstadt University of Technology, Darmstadt, D-64287, Germany
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2007), 48(2), 591-592
CODEN: ACPPAY; ISSN: 0032-3934
PB American Chemical Society, Division of Polymer Chemistry
DT Journal; (computer optical disk)
LA English
AB The suitability of polyfluorene-based iridium complex polymers as components for organic light emitting diodes (OLEDs) was investigated. The iridium-containing polyfluorenes were synthesized using the Suzuki and Yamamoto protocols. For precursor routes, both polycondensation reactions proved to be of similar efficiency. For direct routes, i.e., when iridium-containing monomers are used, the Yamamoto protocol was clearly the method of choice. This is presumably due to the limited stability of iridium complexes under the Suzuki conditions.
IT 1017835-77-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyfluorene-based iridium complex polymers for organic light-emitting diodes)
RN 1017835-77-6 HCAPLUS
CN Iridium, [5-bromo-2-(5-bromo-2-pyridinyl-κN)phenyl-κC]bis[2-(2-pyridinyl-κN)phenyl-κC]-, (OC-6-43)-, polymer with 2,7-dibromo-9,9-bis(2-ethylhexyl)-9H-fluorene (CA INDEX NAME)

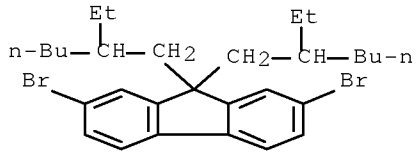
CM 1

CRN 1030852-54-0
CMF C33 H22 Br2 Ir N3
CCI CCS



CM 2

CRN 188200-93-3
CMF C29 H40 Br2



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 07:12:41 ON 29 JUL 2009)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:13:09 ON 29 JUL 2009

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L1             1 S US20060093852/PN OR (US2005-516627# OR WO2003-EP5699 OR DE200
                 E MARSITZKY/AU
L2            29 S E2,E4,E5
                 E HEUER/AU
                 E HEUER H/AU
L3           115 S E3,E10,E17-E19
                 E HUER/AU
                 E WEHRMANN/AU
L4             5 S E3
                 E WEHRMANN R/AU
L5           142 S E3,E10,E11
                 E WEHRMAN/AU
L6             3 S E3,E16,E18
                 E ELSCHNER/AU
L7           113 S E4,E5
                 E REUTER/AU
L8             1 S E3
                 E REUTER K/AU
L9           175 S E3-E7,E28
                 E SAUTTER/AU
L10           24 S E4,E6
                 E HC S/CO
L11            1 S E4/CO,PA,CS
                 E H C S/CO
L12          404 S E10-E27/CO,PA,CS
                 E E10+ALL
L13          510 S E2+RT OR E2-E16/PA,CS
                 E HERMAN/CO
L14           96 S E69-E74/CO,PA,CS
                 E BAYER/CO
                 E E10+ALL
L15        56709 S E2+RT OR E234-E239 OR E2-E239/PA,CS
L16         4106 S BAYER?/CO,PA,CS NOT L15
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L17           1 S L1 AND L2-L16
                SEL RN

     FILE 'REGISTRY' ENTERED AT 07:19:29 ON 29 JUL 2009
L18          12 S E1-E12
L19          55 S SC4/ES AND PMS/CI AND DODECYL AND 1/NR
L20          13 S L19 AND 3/ELC.SUB
L21           1 S L20 AND C16H26S
L22           1 S L18 AND C29H40
                E "(C29H4O)N"/MF
                E "(C29H40)N"/MF
L23           5 S E3 AND C5-C6-C6/ES
                SEL RN 1 4 5
L24           3 S E1-E3
L25           2 S C20H34O2S AND SC4-OC2OC2/ES
                E "(C20H32O2S)N"/MF
L26           1 S L18 AND C14H20O
                E "(C14H20O)N"/MF
L27           7 S E3 AND C6/ES
L28           6 S L27 NOT L26
                E "(C22H36O2)N"/MF
L29           2 S E3 AND C6/ES
L30           1 S L29 NOT DECANEDIYL
                E C5-C5-C6-C6-C6-C6/ES
L31         163 S E3 AND PMS/CI AND 1/NC
L32          42 S L31 AND 6/NR
L33          39 S L32 AND SPIRO?
L34          27 S L33 NOT BR/ELS
L35          23 S L34 NOT (SI OR CL)/ELS
L36          12 S L35 AND (C33H30O OR C45H54O4 OR C45H54O2 OR C57H78O4 OR C25H1
L37          11 S L36 NOT 195063-91-3
L38           5 S C16H28S AND SC4/ES AND PMS/CI AND 1/NC AND 1/NR
                SEL RN 3 5
L39           2 S E1-E2
L40           4 S C29H42 AND C5-C6-C6/ES AND PMS/CI AND 3/NR AND 1/NC
L41           3 S L40 NOT 123864-11-9
L42           0 S C20H32O2S AND SC4-OC2OC2/ES AND PMS/CI AND 2/NR AND 1/NC
L43          10 S C14H22O AND 46.150.18/RID AND PMS/CI AND 1/NC AND 1/NR
L44           2 S C22H38O2 AND 46.150.18/RID AND PMS/CI AND 1/NC AND 1/NR
L45           2 S 213822-49-2 OR 67399-94-4
L46         174 S C22H38O2/MF AND 46.150.18/RID AND 1/NR
L47         148 S L46 NOT PHENOL
L48          88 S L47 NOT BENZENEDIOL
L49          55 S L48 NOT (ETHOXY OR METHOXY)
L50           1 S L49 AND  "BENZENE, 1,4-BIS(OCTYLOXY)-"/CN
L51           1 S L49 AND 1 4 BIS AND ETHYLHEXYL OXY
                E 9841.9.1/RID
L52          34 S E3 AND (IR OR PT OR OS OR GA)/ELS
L53         440 S E3 AND PMS/CI NOT L52
L54         272 S L53 NOT (B OR SI)/ELS
L55          84 S E3 AND CCS/CI
L56          16 S L21,L22,L24,L25,L26,L30,L39,L41,L45,L50,L51
L57           5 S 104934-52-3 OR 123863-99-0 OR 138396-00-6 OR 67399-94-4 OR 36
L58          20 S L56,L57
                SAV TEMP L58 YAMIN516A/A
                SEL RN
L59          74 S E1-E20/CRN

     FILE 'HCAPLUS' ENTERED AT 08:10:22 ON 29 JUL 2009
L60        1844 S L58
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L61           7 S L60 AND L1-L17
L62          43 S L60 AND L58 (L) REACT?
L63          25 S L62 AND L58 (L) REACT?(L)PRODUCT?
L64          18 S L62 NOT L63
L65         713 S L60 AND PY<=2003 NOT P/DT
L66         197 S L60 AND (PD<=20030530 OR PRD<=20030530 OR AD<=20030530) NOT L
L67         911 S L61,L65,L66

     FILE 'REGISTRY' ENTERED AT 08:13:25 ON 29 JUL 2009

     FILE 'HCAPLUS' ENTERED AT 08:13:25 ON 29 JUL 2009
L68             TRA L67 1- RN :     3444 TERMS

     FILE 'REGISTRY' ENTERED AT 08:13:43 ON 29 JUL 2009
L69          3444 SEA L68
L70            35 S L69 AND IR/ELS
L71             4 S L69 AND PT/ELS
L72             1 S L69 AND OS/ELS
L73             7 S L69 AND GA/ELS
L74             1 S L71 AND PT/MF
L75             1 S L73 AND GA/MF
L76             3 S L72,L74,L75
L77             8 S L70-L76 AND L18
L78            29 S L70 NOT L77
L79            26 S L78 NOT 2/IR
L80            19 S L79 AND CCS/CI NOT C5-C6-C6/ES
L81            14 S L80 NOT (C90H108IRN3 OR C39H24IRN3O3 OR C39H24IRN3 OR C31H17F
L82             7 S L79 NOT L80
L83             3 S L78 NOT L79
L84            17 S L83,L81
L85            25 S L77,L84
                  SAV TEMP L85 YAMIN516B/A
L86            71 S L69 AND CCS/CI NOT L70-L85

     FILE 'HCAPLUS' ENTERED AT 08:26:55 ON 29 JUL 2009
L87            22 S L85 AND L67
L88             2 S L87 AND L61-L63
L89             2 S L87 AND (L58 OR L85)(L)REACT?(L)PRODUCT?
L90             2 S L88,L89
L91            20 S L87 NOT L90
L92            16 S L91 AND ?POLYM?
L93             8 S L91 AND POLYM?/SC,SX,CW,CT
L94            16 S L91 AND POLYM?/IT,BI,OBI
L95            16 S L92-L94
L96             4 S L91 NOT L95
L97            16 S L95,L96 AND ?LUMINESC?
L98             9 S L95,L96 AND LUMINESC?/CW,CT,IT
L99             2 S L96 AND C09K011/IPC,IC,ICM,ICS,EPC
L100           20 S L91-L99
L101            6 S L100 AND SEMICONDUCT?/CW,CT,IT,BI,OBI
L102           15 S L100 AND (ELECTROLUMINESCENT DEVICES+OLD,NT OR OPTOELECTRONIC
L103            5 S L100 AND SEMICONDUCTOR DEVICE FABRICATION+OLD,NT/CT
L104           20 S L100-L103
                  SEL DN 15 17 19 20
L105           16 S L104 NOT E21-E24
L106           18 S L90,L105
                  SEL RN

     FILE 'REGISTRY' ENTERED AT 08:42:22 ON 29 JUL 2009
L107          254 S E25-E278
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L108        225 S L107 NOT L58,L85
L109          2 S L108 AND L18
L110          1 S L109 NOT RH/ELS
L111        223 S L108 NOT L109,L110

     FILE 'HCAPLUS' ENTERED AT 08:53:07 ON 29 JUL 2009
L112          1 S L110 AND L106
L113         18 S L106,L112

     FILE 'HCAPLUS' ENTERED AT 08:53:26 ON 29 JUL 2009

     FILE 'REGISTRY' ENTERED AT 08:54:17 ON 29 JUL 2009
L114       2097 S PMS/CI AND (IR OR PT OR OS OR GA)/ELS
L115        129 S L114 AND (2/IR OR 2/PT OR 2/OS OR 2/GA)
L116          3 S L115 AND (C29H40 OR C25H32)
L117          1 S L114 AND IR/ELS AND (PT OR OS OR GA)/ELS
L118          0 S L114 AND PT/ELS AND (OS OR GA)/ELS
L119          0 S L114 AND OS/ELS AND GA/ELS

     FILE 'HCAPLUS' ENTERED AT 09:00:11 ON 29 JUL 2009
L120          2 S L116

     FILE 'REGISTRY' ENTERED AT 09:00:50 ON 29 JUL 2009
L121        176 S L114 AND C5-C6-C6/ES
L122         52 S L114 AND SC4/ES
L123          2 S L114 AND SC4-OC2OC2/ES
L124         11 S L114 AND C5-C5-C6-C6-C6-C6/ES
L125        229 S L121-L124 NOT L116
L126        118 S L125 NOT (B OR SI)/ELS
L127          6 S L126 AND (C20H40 OR C29H40BR2)
L128          4 S L127 AND 2/NC
L129          2 S L128 AND IR/ELS

     FILE 'HCAPLUS' ENTERED AT 09:06:54 ON 29 JUL 2009
L130          3 S L129

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